

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-11				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015 Base                      Option Period Number    2			Title of Work Assignment/SF Site Name NSHNS				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance  From   04/30/2014   To   04/29/2015				
Comments: This action initiates WA 2-11 entitled "NSHMS contaminant analyses". Jesse Miller is appointed as the Work Assignment Manager (WAM). Tracy Atagi is the Alternate WAM. The estimated LOE is 555 hours. The statement of work is attached. The contractor shall submit a workplan/cost estimate.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <span style="border: 1px solid black; padding: 2px;">22</span> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						555				
Total:						555				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name    Jesse Miller  <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number   703-308-1180 FAX Number:				
Project Officer Name    Shannon Sturgeon  <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name  <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name    Christie Deskiewicz  <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-3316 FAX Number:				

## **EPA CONTRACT NUMBER EP-W-12-013**

### **Statement of Work**

Work Assignment Number: 2-11

Work Assignment Amendment Number: 0

Title: **Identification of Non-Hazardous Secondary Materials (NSHMs) That Are Solid Waste, Contaminant Analyses, and Related Work**

Work Assignment Manager (WAM):

Jesse Miller

Address:

OSWER/ORCR /MRWMD  
Mail Code 5304P  
1200 Pennsylvania Ave. N.W.  
Washington, D.C. 20460

Telephone:

(703)-308-1180  
(703) 308-5268 (front office)  
(703) 308-7903 (FAX)

### **BACKGROUND:**

The United States Court of Appeals for the District of Columbia Circuit vacated and remanded two U.S. Environmental Protection Agency (EPA or the Agency) rules promulgated under the CAA — The Commercial and Industrial Solid Waste Incineration definitions rule (“Definitions Rule”), issued under CAA section 129, and the Industrial Boilers Maximum Achievable Control Technology (MACT) standards rule (“Boilers Rule”), issued under CAA section 112. The court concluded that EPA erred by excluding units that combust solid waste for the purposes of energy recovery from the Definitions Rule and including such units in the Boilers Rule. In response to the court’s decision, EPA is preparing to establish new standards under CAA sections 112 and 129 for the various units subject to each section.

As part of the development of new standards under CAA sections 112 and 129, EPA must establish under RCRA, what non-hazardous secondary materials constitute “solid waste.” This is necessary because, under the court’s decision, any unit combusting any “solid waste” must be regulated as a “solid waste incineration unit,” regardless of the function of the combustion device. If a non-hazardous material is not a “solid waste” under RCRA and such material is burned for fuel or used as an ingredient in a combustion manufacturing process, then under the court’s decision, the combustion unit would properly be regulated pursuant to section 112 of the CAA. Alternatively, if such material is a “solid waste” under RCRA, and is burned for fuel value or used as an ingredient in a manufacturing process and such ingredient is combusted, then the unit must be regulated under section 129 of the CAA.



In March, 2011, the Final Rule: Identification of Non Hazardous Secondary materials that are Solid Waste was signed. A final rule identifying targeted revisions to the March 2011 rule was issued in February 2013. ORCR is currently in the process of implementing those rules.

### **SCOPE OF THIS WORK ASSIGNMENT:**

The purpose of this work assignment is to provide for necessary analytical and other technical support for implementation of the final rule. This Work Assignment may also include contaminant data analysis, and data quality assessment. Project coordination, attendance at Agency and public meetings, project communication, and outreach are also within the scope of this work assignment.

### **WORK STATEMENT:**

#### Task 1.            Work Plan, Progress Reports and Budget

Within twenty (20) days of receipt of this work assignment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: [http://www.epa.gov/quality/qa\\_docs.html](http://www.epa.gov/quality/qa_docs.html)

As part of the monthly progress reports for this Work Assignment, the Contractor shall provide a summary of all data quality activities conducted during each month.

No confidential business information (CBI) shall be collected or used under this Work Assignment. However, proprietary data may be used following written approval from the COR.

Contractor travel is authorized under this Work Assignment. The contractor shall budget for no more than two overnight trips for up to two persons, round trip from Boston to Washington, D.C. Any travel will have to be authorized by the COTR in advance.

#### Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

#### Task 2.            General Analytical Support

The project addressed under this Work Assignment Amendment: **Identification of Non-Hazardous Secondary Materials That Are Solid Waste Analyses**, is an action that requires a wide range of analytical support including evaluation of contaminant sampling data from

NHSMs, and a comparison of the contaminant concentration levels in those NHSMs to levels in traditional fuels including: coal, oil, biomass and natural gas. The Agency also anticipates the need to assess heretofore unknown issues, materials, or industries that may be impacted by the action. These assessments may require data collection and assessment, new research and analysis, or related supporting activities.

An understanding of the contaminant comparison methodologies described in the preamble to the Feb 7, 2013 NHSM final rule (78 FR 9111) is expected. In addition, part of this task is to build on the framework in the preamble and to be able to apply contaminant comparisons on a case-by-case basis. Novel issues will have to be resolved pertaining to contaminant comparison methods acceptable for different instances. This includes an understanding of when it is acceptable to group contaminants, an understanding of acceptable statistics when comparing ranges, etc.

Under this Task, the contractor shall be prepared to assess unexpected issues and provide research, support, and documentation, as identified through a Technical Directive (TD). This Task also includes related support needs such as scoping papers, summary papers, and briefings.

This task will include a summary of NHSM rulemaking comments, a categorization of NHSM rulemaking comments, and development of response to those comments (integrating EPA responses as appropriate into a response package).

All work under this Task shall be initiated through a Technical Directive (TD). The contractor shall budget for approximately six (6) TDs under this Task.

#### Deliverable(s) and Schedule:

There shall be separate draft and final deliverables for each Technical Directive received under this task. These deliverables shall be in e-mail, memo, paper, or briefing format, as appropriate for the material and requirements. Tables and charts shall be included in all deliverables as appropriate to ensure presentation clarity and ease of understanding. (All charts shall be in an editable format.) The draft deliverables shall be due to the COR no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information. The final deliverable(s) shall be due to the COR no later than five (5) Agency working days following contractor receipt of all written COR comments on the draft document(s).

## SCHEDULE OF DELIVERABLES

TASK NUMBER and DELIVERABLE	WORK ASSIGNMENT DUE DATES	
	DRAFT	FINAL

<u>Task 2: General Analytical Support</u>	
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Per each Technical Directive (TD)	Ten (10) Agency working days following contractor receipt of the TD.	Five (5) Agency working days following contractor receipt of all written comments on the draft.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-11				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			NHSMs				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 05/19/2014 with a Level of Effort (LOE) of 555 hours which equals to \$54,838.60 (b)(4) cost (b)(4) fee). The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO      22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012   To   04/29/2015				555						
This Action:				0						
Total:				555						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name    Jesse Miller						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number    703-308-1180				
						FAX Number:				
Project Officer Name    Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    703-605-0509				
						FAX Number:    703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name    Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    202-564-8316				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-11				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number       2			NSHMs				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this action is to add level of efforts (LOE) in the amount of 1,730 hours to Work Assignment, (WA) 2-11. The new total LOE for the work assignment is 2,285. The revised statement of work is attached. The contractor shall submit a work plan and cost estimate in response to this request.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <span style="border: 1px solid black; padding: 2px;">22</span> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012   To   04/29/2015										
This Action:						2,285				
Total:						2,285				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name    Jesse Miller						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number    703-308-1180				
						FAX Number:				
Project Officer Name    Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    703-605-0509				
						FAX Number:    703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name    Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    202-564-8316				
						FAX Number:				

## **EPA CONTRACT NUMBER EP-W-12-013**

### **Statement of Work**

Work Assignment Number: 2-11

Work Assignment Amendment Number: 2

Title: **Identification of Non-Hazardous Secondary Materials (NSHMs) That Are Solid Waste, Contaminant Analyses, and Related Work**

Work Assignment Manager (WAM):

Jesse Miller

Address:

OSWER/ORCR /MRWMD  
Mail Code 5304P  
1200 Pennsylvania Ave. N.W.  
Washington, D.C. 20460

Telephone:

(703)-308-1180  
(703) 308-5268 (front office)  
(703) 308-7903 (FAX)

### **BACKGROUND:**

The United States Court of Appeals for the District of Columbia Circuit vacated and remanded two U.S. Environmental Protection Agency (EPA or the Agency) rules promulgated under the CAA — The Commercial and Industrial Solid Waste Incineration definitions rule (“Definitions Rule”), issued under CAA section 129, and the Industrial Boilers Maximum Achievable Control Technology (MACT) standards rule (“Boilers Rule”), issued under CAA section 112. The court concluded that EPA erred by excluding units that combust solid waste for the purposes of energy recovery from the Definitions Rule and including such units in the Boilers Rule. In response to the court’s decision, EPA is preparing to establish new standards under CAA sections 112 and 129 for the various units subject to each section.

As part of the development of new standards under CAA sections 112 and 129, EPA must establish under RCRA, what non-hazardous secondary materials constitute “solid waste.” This is necessary because, under the court’s decision, any unit combusting any “solid waste” must be regulated as a “solid waste incineration unit,” regardless of the function of the combustion device. If a non-hazardous material is not a “solid waste” under RCRA and such material is burned for fuel or used as an ingredient in a combustion manufacturing process, then under the court’s decision, the combustion unit would properly be regulated pursuant to section 112 of the CAA. Alternatively, if such material is a “solid waste” under RCRA, and is burned for fuel value or used as an ingredient in a manufacturing process and such ingredient is combusted, then the unit must be regulated under section 129 of the CAA.

In March, 2011, the Final Rule: Identification of Non Hazardous Secondary materials that are Solid Waste was signed. A final rule identifying targeted revisions to the March 2011 rule was issued in February 2013. ORCR is currently in the process of implementing those rules.

This amendment to Work Assignment 2-11 is a logical follow-on to Work Assignment 1-11 under contract EP-W-12-013. In addition to the two rules discussed above, ORCR is also working on another two rules that will add materials to the list of categorical non-waste fuels. On April 14, 2014, a proposed rule was signed titled Additions to List of Section 241.4 Categorical Non-Waste Fuels. This rule proposed to list the following as categorical non-waste fuels: 1) construction and demolition wood processed according to best management practices; 2) paper recycling residuals (including old corrugated cardboard); and 3) creosote treated railroad ties. ORCR is also working on a categorical rule looking to add different types of treated wood as categorical non-waste fuels. Both of these categorical rules will be worked on simultaneously.

### **SCOPE OF THIS WORK ASSIGNMENT:**

The purpose and scope of this amendment to the Statement of Work is for the contractor to continue to provide technical support to EPA in further implementing the March, 2011 Final Rule as well as providing technical support for developing the new categorical rules.

This work assignment may also include contaminant data analysis and data quality assessment. Project coordination, attendance at Agency and public meetings, project communication, and outreach are also within the scope of this work assignment.

In addition, this work assignment is being amended to provide for necessary analytical and other technical support for the development and implementation of the current categorical rules being worked on by ORCR.

### **WORK STATEMENT:**

#### **Task 1. Work Plan, Progress Reports and Budget**

Within twenty (20) days of receipt of this work assignment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: [http://www.epa.gov/quality/qa\\_docs.html](http://www.epa.gov/quality/qa_docs.html)

As part of the monthly progress reports for this Work Assignment, the Contractor shall provide a summary of all data quality activities conducted during each month.

No confidential business information (CBI) shall be collected or used under this Work Assignment. However, proprietary data may be used following written approval from the COR.

Contractor travel is authorized under this Work Assignment. The contractor shall budget for no more than two overnight trips for up to two persons, round trip tickets to Washington, D.C. Any travel will have to be authorized by the TOCOR in advance.

Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

Task 2.        General Analytical Support

The project addressed under this Work Assignment Amendment: **Identification of Non-Hazardous Secondary Materials That Are Solid Waste Analyses**, is an action that requires a wide range of analytical support including evaluation of contaminant sampling data from NHSMs, and a comparison of the contaminant concentration levels in those NHSMs to levels in traditional fuels including: coal, oil, biomass and natural gas. The Agency also anticipates the need to assess heretofore unknown issues, materials, or industries that may be impacted by the action. These assessments may require data collection and assessment, new research and analysis, or related supporting activities. The Agency also anticipates the need to assess case-by-case processing for different companies claiming fuel to be used under NHSM. This assessment will also include how these case-by-case scenarios meet the legitimacy criteria laid out in the 2011 rule.

An understanding of the contaminant comparison methodologies described in the preamble to the Feb 7, 2013 NHSM final rule (78 FR 9111) is expected. In addition, part of this task is to build on the framework in the preamble and to be able to apply contaminant comparisons on a case-by-case basis. Novel issues will have to be resolved pertaining to contaminant comparison methods acceptable for different instances. This includes an understanding of when it is acceptable to group contaminants, an understanding of acceptable statistics when comparing ranges, etc.

This task will also include a summary of NHSM rulemaking comments, a categorization of NHSM rulemaking comments, and development of response to those comments (integrating EPA responses as appropriate into a response package). Upon direction of the TOCOR, the contractor shall develop a draft and a final document for both categorical NHSM rules.

Under this Task, the contractor shall be prepared to assess unexpected issues and provide research, support, and documentation, as identified through a Technical Directive (TD). This Task also includes related support needs such as scoping papers, summary papers, and briefings.

All work under this Task shall be initiated through a Technical Directive (TD). The contractor shall budget for approximately five (5) TDs under this Task.



Examples of the Technical Directives for Task 2 are the following:

1. Contractor support for the Rule Clarifications and Response Letters. EPA regularly gets requests from industry seeking EPA's view regarding their process and fuel in terms of 40 CFR part 241. Technical assistance is required from the contractor in determining whether or not the legitimacy criteria is met.
2. Contractor support for technical assistance in drafting the final rule for Additions to List of Section 241.1 Categorical Non-Waste Fuels. This includes support with evaluating data and contaminant tables that have been submitted.
3. Contractor support for technical assistance in drafting the proposed and final rules for adding additional types of treated wood (including but not limited to: wood treated with waterborne organic-based or copper-based preservatives, wood treated with creosote, and wood treated with oilborne copper naphthenate) to the categorically excluded list. This includes support with evaluating data and contaminant tables that have been submitted.
4. Contractor support for the development of a comment response document for the Additions to List of Section 241.1 Categorical Non-waste Fuels final rulemaking.
5. Contractor support for the development of a comment response document for the rulemaking adding several types of treated wood of the list of Section 241.1 categorical non-waste fuels.

### Task 3.      Regional/State NHSM Training Guide

Upon direction of the TOCOR, the contractor shall develop a training guide for regional and state personnel. This training guide may include but are not limited to the following options: (1) a guidance document explaining how the new NHSM regulations are put into practice; (2) an online training component that walks regional and state personnel through the details of the rules; (3) a brochure that breaks down the specifics of the NHSM requirements and can be posted on ORCR's NHSM website; (4) a webinar specifically designed for regional and state personnel; and (5) a one to two day training course hosted in Washington D.C. that provides a step-by-step breakdown of how the NHSM rules apply.

All work under this Task shall be initiated through a Technical Directive (TD). The contractor shall budget for approximately one (1) TDs under this Task.

Examples of the Technical Directives for Task 3 are the following:

1. Upon direction of the TOCOR, the contractor will develop a training manual that will help regional and state staff understand and implement the new NHSM criteria. The TOCOR will direct the extent of training and guidance that is required. The TOCOR will also determine whether a training webinar is required.

Deliverable(s) and Schedule:

There shall be separate draft and final deliverables for each Technical Directive received under this task. These deliverables shall be in e-mail, memo, paper, or briefing format, as appropriate for the material and requirements. Tables and charts shall be included in all deliverables as appropriate to ensure presentation clarity and ease of understanding. (All charts shall be in an editable format.) The draft deliverables shall be due to the COR no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information. The final deliverable(s) shall be due to the COR no later than five (5) Agency working days following contractor receipt of all written COR comments on the draft document(s).

## SCHEDULE OF DELIVERABLES

TASK NUMBER and DELIVERABLE	WORK ASSIGNMENT DUE DATES	
	DRAFT	FINAL

**Task 2: General Analytical Support**

Per each Technical Directive (TD)	Ten (10) Agency working days following contractor receipt of the TD.	Five (5) Agency working days following contractor receipt of all written comments on the draft.
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<i>Task 3: Regional/State NHSM Training Guide</i>
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Per each Technical Directive (TD)	Ten (10) Agency working days following contractor receipt of the TD.	Five (5) Agency working days following contractor receipt of all written comments on the draft.
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<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-11				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			NHSMs				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's workplan/cost estimate dated 10/28/2014 with LOE of 1730 hours and \$168,356.94 (b)(4) cost (b)(4) fee). The total LOE is now 2,285 and \$223,195.54 (b)(4) cost (b)(4) fee) with a not to exceed (cost plus fee) ceiling of \$100,000. The contractor is not allowed to exceed the ceiling without approval from the Contracting Officer.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO      22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 2,285						
04/30/2012 To 04/29/2015										
This Action:				0						
Total:				2,285						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name    Jesse Miller							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number    703-308-1180			
							FAX Number:			
Project Officer Name    Shannon Sturgeon							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number:    703-605-0509			
							FAX Number:    703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name    Eulvid Rocque							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number:    202-564-8316			
							FAX Number:			

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number 2-11</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> Other             <input checked="" type="checkbox"/> Amendment Number:           </div> <p style="text-align: right;">000004</p>								
<p>Contract Number EP-W-12-013</p>		<p>Contract Period 04/30/2015 To 04/29/2016</p> <p>Base Option Period Number 2</p>		<p>Title of Work Assignment/SF Site Name NSHMs analysis</p>						
<p>Contractor INDUSTRIAL ECONOMICS, INCORPORATED</p>			<p>Specify Section and paragraph of Contract SOW</p>							
<p>Purpose:</p> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Work Assignment  <input checked="" type="checkbox"/> Work Assignment Amendment  <input type="checkbox"/> Work Plan Approval           </div> <div> <input type="checkbox"/> Work Assignment Close-Out  <input type="checkbox"/> Incremental Funding           </div> </div>			<p>Period of Performance</p> <p>From 04/30/2014 To 04/29/2015</p>							
<p>Comments:</p> <p>The purpose of this amendment is to approve the contractors reallocation of funding from IEC to team subcontractor (b)(4) request in response to recent technical direction from the WAM, which will require additional effort from (b)(4). None of these changes will result in any additional cost to the government. The LOE approved remains at 2285 hours.</p>										
<div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> Superfund           Accounting and Appropriations Data           <input checked="" type="checkbox"/> Non-Superfund         </div>										
<p>SFO (Max 2) <span style="border: 1px solid black; padding: 2px 10px;">22</span></p> <p style="text-align: center; font-size: small;">Note: To report additional accounting and appropriations date use EPA Form 1900-69A.</p>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2015 To 04/29/2016				2,285						
This Action:				0						
Total:				2,285						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Jesse Miller  <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-bottom: 1px solid black; width: 40%;"></div> <div style="border-bottom: 1px solid black; width: 40%;"></div> </div> <div style="display: flex; justify-content: space-between; align-items: center; font-size: small;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code:				
						Phone Number 703-308-1180				
						FAX Number:				
Project Officer Name Shannon Sturgeon  <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-bottom: 1px solid black; width: 40%;"></div> <div style="border-bottom: 1px solid black; width: 40%;"></div> </div> <div style="display: flex; justify-content: space-between; align-items: center; font-size: small;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code:				
						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name  <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-bottom: 1px solid black; width: 40%;"></div> <div style="border-bottom: 1px solid black; width: 40%;"></div> </div> <div style="display: flex; justify-content: space-between; align-items: center; font-size: small;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code:				
						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque  <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-bottom: 1px solid black; width: 40%;"></div> <div style="border-bottom: 1px solid black; width: 40%;"></div> </div> <div style="display: flex; justify-content: space-between; align-items: center; font-size: small;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code:				
						Phone Number: 202-564-8316				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number       2			Haz. Waste Export Import Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: This action initiates WA 2-12 entitled " Hazardous Waste Export Import Rule".   Phuc Phan is appointed the WAM and Chris McMinimy is appointed the alt. WAM.   The LOE for this WA is 529 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO <span style="border: 1px solid black; padding: 2px;">22</span> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:   0				
04/30/2012   To   04/29/2015										
This Action:						529				
Total:						529				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Phuc Phan						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number   703-306-1013				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:   703-605-0509				
						FAX Number:   703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:   202-564-8316				
						FAX Number:				

## Statement of Work

22 April, 2014

Project Title: Regulatory Impact Analysis (RIA) for EPA's Hazardous Waste Export-Import Revisions Rule  
Contract No.: EP-W-12-013  
Work Assignment No.: 2-12  
Works Assignment Manger (COTR): Phuc Phan, Economist  
EPA Office of Resource Conservation & Recovery (ORCR)  
703-306-1013  
Alt COTR: Chris McMinimy, Economist  
EPA Office of Resource Conservation & Recovery (ORCR)  
703-308-0105  
Period of Performance: CO signature through April 29, 2015.

### I. Introduction

EPA is revising hazardous waste export-import related requirements at 40 CFR Part 262, Part 263, Part 264, and Part 265, to achieve the following 3 goals: 1) be more consistent with OECD requirements, 2) allow electronic submittal of export notices and annual reports, and 3) enable electronic validation of hazardous waste export shipments. A description of each of these respective changes can be found below.

EPA currently regulates exports of hazardous waste under 40 CFR Part 262 Subparts E and H, depending on the waste type, the final destination country, and whether the waste will be disposed of or recycled. Regulations under Subpart H only apply to shipments of hazardous waste exported for the purpose of recovery to countries other than Canada or Mexico that belong to the Organization for Economic Cooperation and Development (OECD). The requirements under Subpart H are more stringent than the requirements under Subpart E because among other things, Subpart H requires that:

- 1) export shipments be accompanied by an OECD movement document, an international tracking document similar to a RCRA Hazardous Waste Manifest,
- 2) a contract or equivalent legal arrangements must be in place between the exporter and receiving facility before shipments occur,
- 3) the receiving facility must send a *Certificate of Recovery*, which states that the received waste has been recovered in the method agreed upon in the contract, to the exporter, the exporting country and the importing country, and
- 4) if a waste export cannot be completed in accordance with the terms of the contract, and alternative arrangements cannot be made, then the exporter must ensure the waste is returned to the US within 90 days from the date the country of transit or import notifies EPA of the need to return the shipment.

EPA is proposing to revise the existing standards at Subpart E to more closely match the more stringent existing standards at Subpart H. EPA is making these changes in part due to a report by the Commission for Environmental Cooperation (CEC), a North American environmental intergovernmental organization, which found that significant amounts of RCRA hazardous waste spent lead-acid batteries (SLABs) were shipped in 2011 to 47 countries for which no record of consent from the receiving country can be found, and that significant discrepancies between EPA and Census Bureau figures for SLAB exports exist. EPA believes that applying the relevant requirements of Subpart H to all exports of hazardous waste will help to address the CEC report's findings. To minimize burden, EPA is considering proposing to allow use of the Canadian manifest in lieu of the OECD movement document for export shipments to Canada, as Canadian requirements currently require that a Canadian manifest accompany such shipments from the U.S. shipping site to the Canadian destination.

EPA is also proposing to allow electronic submittal of export notices and annual reports currently required by Subparts E and H. The goal of this change is to make the submittal and processing of export notices and annual reports more efficient for both EPA and the regulated community, thus reducing the burden of complying with RCRA.

Finally, EPA is proposing to require exporters of hazardous waste to electronically submit a short list of waste shipment data for each export shipment to the Automated Export System (AES), a joint venture between U.S. Customs and Border Protection (CBP), U.S. Census Bureau (Census), and other federal agencies. Submittal of this data will enable automated validation of the export shipment prior to its exit. Such validation will ensure the exporter's compliance with RCRA export requirements, providing immediate feedback to the exporter about any errors and returning an Internal Transaction Number (ITN) as confirmation of successful filing. In addition, the automated validation of electronically submitted hazardous waste export shipment data into AES will replace time-consuming reviews of paper documents by CBP port officers at the exit port.

## **II. Purpose and Scope of this Work Assignment**

The purpose of this Work Assignment (WA) is to provide for all analytical assessment needs related to costs, economic impacts, benefits, small entity impacts, information collection request (ICR), document preparation, and related technical and supporting analyses necessary to sustain the Agency's promulgation of the proposed rule: "Hazardous Waste Export-Import Revisions."

The scope of this WA includes: refinement of methodology development; baseline determination; data collection, assessment, and quality control; analytic model development, and document preparation. This SOW also includes assessment of impacts to small entities, and assessment of impacts to minority and low-income communities (environmental justice), assessment of unfunded mandates, and assessment of all other Executive Orders and Acts pertinent to this action. The proposed revisions to the hazardous waste import-export regulatory program to be covered in this WA include, but may not be limited to the three changes outlined in Section 1. These changes are:



- 1) With respect to exports, revise export requirements at 40 CFR Part 262 Subpart E and associated general export requirements in Part 263 to match relevant export requirements found at 40 CFR Part 262 Subpart H and Part 263. With respect to imports, revise import requirements at 40 CFR Part 262 Subpart F, Part 263, Part 264 and Part 265 to match relevant import requirements found at 40 CFR Part 262 Subpart H, Part 263, Part 264 and Part 265.
- 2) Allow electronic submission of export notices and annual reports required by Subparts E and H.
- 3) Require electronic submission and validation of export shipment data in the Automated Export System.

Additional detail on the proposed structure of the rulemaking is available in other documentation under development by EPA and provided to the contractor.

Finally, this WA includes the preparation of emergency turnaround assessments, general supporting materials, briefings, general project coordination, and ongoing communication/outreach to the WAM/TOCOR.

### **III. Work Statement**

#### **Task 1.                      Work Plan, Progress Reports and Budget**

Within ten (10) days of receipt of this work assignment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: [http://www.epa.gov/quality/qa\\_docs.html](http://www.epa.gov/quality/qa_docs.html)

As part of the monthly progress reports for this Work Assignment, the contractor shall provide a summary of all data collection and quality control activities conducted during each month.

No confidential business information (CBI) shall be collected or used under this Work Assignment. However, proprietary data may be used following written approval from the WAM/TOCOR.

Contractor travel is authorized under this Work Assignment. The contractor shall budget for no more than one overnight trip for two or less persons, round trip from Cambridge/Boston, MA to Arlington, VA/Washington, D.C.

**Deliverable(s) and Schedule:**

Work Plan and Budget within allotted time frame identified above.

**Task 2:**                      **Programmatic Support**

The contractor shall provide programmatic support in the area of short-term or quick turnaround technical assistance, analysis, and supporting documents to ORCR for the proposed “**Hazardous Waste Export-Import Revisions Rule**,” and related work.

Under this task the contractor shall develop and submit various general support documents and analyses directly or indirectly related to the proposed and final rule. Examples of such documents/analyses may include, but not be limited to:

- cost or cost savings summary tables addressing impacts of one or more of the regulatory improvement areas;
- briefing packages;
- fact sheets, flow charts, or presentation graphics;

The need for and number of such documents is uncertain at the time of this work assignment. The WAM will provide a Technical Directive (TD) designed to clarify the need and scope of such document(s), as necessary. The contractor shall budget for approximately three (3) TDs under this Task.

**Deliverable(s) and Schedule:**

<b>DELIVERABLES</b>	<b>DUE DATES</b>
Development of quick-turnaround support documents and analyses related to the rule:	<u>Draft</u> : Five (5) Agency working days from contractor receipt of TD, and all supporting information.
To be defined in each TD (e.g., briefing package, fact sheet)	<u>Final</u> : Five (5) Agency working days from contractor receipt of all written WAM comments on the draft.

**Task 3:**                      **Regulatory Support**

The contractor shall continue to analyze and refine technical, cost, economic, human health and ecological benefits, and related analytical analyses and support to ORCR in development of the proposed/final regulation: “**Hazardous Waste Export-Import Revisions Rule**.”

Under this Task, the contractor shall continue to refine the analytic baseline consisting of estimated annual export shipments of Spent Lead-Acid Batteries and other RCRA hazardous wastes. To estimate this figure, the contractor shall utilize SLAB and other hazardous waste export notice and annual report data, from 2011 to present, including the tonnage exported, the

destination of the exports, and the regulatory requirements (Subparts E or H) to which the shipments of SLABs and other hazardous waste are subject. In addition, because significant differences between EPA's export annual report data on shipments of SLABs made under consent and U.S. Census Bureau data on exports of SLABs have been documented, baseline data on all exports of SLABs from 2011 to the present will be pulled from the U.S. Census Bureau's publicly available data. The contractor shall then estimate the average container size and weight of SLAB export shipments using EPA's export annual report data and use this figure to estimate the average annual number of export shipments from the U.S. Census Bureau data. Baseline development shall be initiated upon contractor receipt of this approved work assignment.

Building from the baseline, the contractor shall develop an analytical methodology, create the analytic model, and apply this model to estimate the economic impacts, costs, and qualitatively describe human health benefits of the proposed regulatory changes. The contractor shall also identify analytical limitations associated with the assessment for each issue/improvement assessment, or summarized in aggregate.

The contractor shall build upon the methodology described in EPA's *Cost Assessment for the Final Rule on Exports and Imports of Hazardous Waste Destined for Recovery Among OECD Countries, Exports of Spent Lead-Acid Batteries from the U.S., and Import Consent Documentation*, to complete this task. The aforementioned document shall be provided to the contractor by the WAM.

As this project advances, additional regulatory improvements, alternative options, and/or scenarios within options may be identified and require assessment. These modifications may be the result of Team determinations, ORCR management directives, or OMB comments. These additional needs will be identified, as necessary, via a Technical Directive (TD) issued by the WAM. The contractor shall budget for approximately three (3) alternative options assessment TDs under this Task.

#### **Deliverable(s) and Schedule:**

Draft and final deliverables shall be presented in response to the baseline development requirements, and each Technical Directive. The first set of deliverables shall be in memo format, presenting a clear description of, and justification for the baseline, description of the analytical methodology, description of the data (universe, unit cost, etc.) and sources, presentation of findings, and identification of the key analytical limitations. The TD deliverables shall assess impacts (costs or cost savings and other benefits) to both the regulated community and governmental entities (Federal, state, and local). Tables, charts, and graphics shall be incorporated, as appropriate for both sets of deliverables, to enhance and clarify the presentation.

DELIVERABLES	DUE DATES
<p><b>A) Baseline and Methodology Development</b></p>	<p><u>Draft Methodology</u>: Incorporate EPA comments and edits on Draft Methodology within five (5) Agency working days following contractor receipt of this signed work assignment and EPA comments on the Draft Methodology (previously submitted).</p> <p><u>Final Methodology</u>: Incorporate EPA comments and edits on regulatory baseline and submit final baseline within five (5) Agency working days following contractor receipt of this signed work assignment and EPA comments on the draft baseline (previously submitted).</p>
<p><b>B) Economic impacts, costs, and benefits of the proposed approach</b></p>	<p>Incorporate EPA comments on Draft Findings, by issue, submit Final Findings no later than five (5) Agency working days following contractor receipt of this signed work assignment and EPA comments on the Draft Findings (previously submitted).</p>
<p><b>C) Per Each Technical Directive</b></p>	<p><u>Draft</u>: Five (10) Agency working days following contractor receipt of each TD plus all necessary supporting information.</p> <p><u>Final</u>: Five (5) Agency working days following contractor receipt of all TOCOR written comments on the draft.</p>

**Task 4:****Economic Assessment Document**

**Sub-Task A:** Under this sub Task the contractor shall provide the necessary support to the Agency by conducting qualitative and quantitative analyses and assessments, and document preparation for the economic assessment document to be entitled: *Regulatory Impact Analysis of the Hazardous Waste Export-Import Revisions Rule, As Proposed*. The contractor shall document the analytical methodology, assumptions, rules and principles used in the preparation of this document. This assessment document shall address costs and/or cost savings, economic impacts, benefits, and other impacts related to all appropriate Executive Orders and Acts (e.g., environmental justice, small entity impacts, unfunded mandates). This document shall include, but not be limited to the following: executive summary, table of contents, purpose and objectives, need for regulatory action, regulatory and non-regulatory alternatives to proposed action, data and methodology, findings (cost, economic, and benefit) for each regulatory change (see Purpose), assessment of all relevant Executive Orders and Acts, key assumptions and limitations, and references.

This economic assessment shall be built upon the methodologies described in EPA's *Cost Assessment for the Final Rule on Exports and Imports of Hazardous Waste Destined for Recovery Among OECD Countries, Exports of Spent Lead-Acid Batteries from the U.S., and Import Consent Documentation*, to complete this task. The aforementioned document shall be provided to the contractor by the WAM.

This economic assessment shall adhere to all relevant requirements established under Executive Order (EO) 12866, as amended by EO 13563, OMB guidance document A-4, and the most recent EPA guidance on the preparation of economic assessments and regulatory impact analyses.

**Sub-Task B:** In addition to the above, the Agency may require additional supporting analyses, assessments, and documents not yet identified, but that are related to the Economic Assessment. Under this sub task, the contractor shall be prepared to develop and submit various general support documents and analyses related to alternative regulatory or non regulatory actions associated with the targeted regulatory improvements or new and currently undefined improvements. The actual need for and scope/focus of such additional support documents is uncertain at the time of issuance of this Work Assignment.. The WAM will provide a TD designed to clarify the need and scope of such document(s), as necessary. The contractor shall budget for approximately two (2) TDs under this sub Task.

**Deliverable(s) and Schedule:**

Two sets of deliverables are required under this Task:

**Sub-Task A:** The contractor shall deliver draft and final versions of the complete Assessment document, as described above. The draft version shall be due to the WAM no later than June 19, 2014 according to the current rule schedule. The final Assessment document shall incorporate all written comments received from the WAM and be delivered

no later than ten (10) Agency working days following contractor receipt of all such comments.

Sub-Task B: All deliverables under this Sub-Task shall be TD driven. No work shall be conducted or deliverables prepared under Sub-Task Area B without a Technical Directive. Draft and final deliverables shall be presented in response to each TD. The draft deliverable shall be due to the WAM no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information. The final deliverable shall incorporate all written comments received from the WAM on the draft, and be due no later than five (5) Agency working days following contractor receipt of all such comments.

#### **Task 5: Information Collection Request (ICR) Document**

Subtask A: Under this Task the contractor shall provide technical support in the development of an annotated outline of the Information Collection Request (ICR) document based on the previous ICR Supporting Statement document provided to the contractor by the WAM. This annotated outline should include all sections and subsections of the document as well as shells of all necessary tables.

Subtask B: In addition to the above, the Agency may require the contractor to complete the ICR Supporting Statement document. This document shall address the information to be collected, provide the reason this information is necessary, and estimate the time and cost for the regulated entity to respond to the request, and for all affected levels of government to review and respond, as necessary. This document shall follow the standard ORCR template for preparation of regulatory ICRs, and adhere to requirements established in the EPA guidance document: *ICR Handbook - EPA's Guide to Writing Information Collection Requests Under the Paperwork Reduction Act of 1995*, as Revised November 2001. The actual need for and scope of such additional work is uncertain at the time of issuance of this Work Assignment. The WAM will provide a TD designed to clarify the need and scope of such document(s), as necessary. The contractor shall budget for approximately two (2) TDs under this sub Task.

#### **Deliverable(s) and Schedule:**

Subtask A: The annotated outline of this ICR document shall be delivered to the WAM by June 19, 2014 according to the current rule schedule. The final annotated outline ICR document shall incorporate all written comments received from the WAM, and be due no later than ten (10) Agency working days following contractor receipt of all such comments.

Subtask B: All deliverables under this Sub-Task shall be TD driven. No work shall be conducted or deliverables prepared under Sub-Task Area B without a Technical Directive. Draft and final deliverables shall be presented in response to each TD. The draft deliverable shall be due to the WAM no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information. The final deliverable shall incorporate all written comments received from the WAM on the draft,

and be due no later than five (5) Agency working days following contractor receipt of all such comments.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			Reg Impact Analysis for EPA's				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW all tasks					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work dated May 15th, 2014 with Level of Efforts, (LOE) at 529 with cost plus fee at \$52,171.99 (b)(4) cost (b)(4) fee). The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO      22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 529				
04/30/2012   To   04/29/2015										
This Action:						0				
Total:						529				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name    Phuc Phan						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number    703-306-1013				
						FAX Number:				
Project Officer Name    Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name    Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-564-8316				
						FAX Number:				



<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number    2			Haz. Waste Import/Export				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to change the Work Assignment Manager, (WAM) from Phuc Phan to Alan Barnosky. All terms and conditions remain the same.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <span style="border: 1px solid black; padding: 2px;">22</span>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 529				
04/30/2014 To 04/29/2015										
This Action:						0				
Total:						529				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Alan Barnosky						Branch/Mail Code:				
						Phone Number 202-564-0000				
_____ (Signature)                      (Date)						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
						Phone Number: 703-605-0509				
_____ (Signature)                      (Date)						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature)                      (Date)						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
						Phone Number: 202-564-8316				
_____ (Signature)                      (Date)						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			Hazardous Waste Export-Import				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to add additional level of efforts, (LOE) in the amount of 223 hours to this work assignment. The new LOE for this WA is now 752 hours. The statement of work is attached. The contractor shall submit a work plan and cost estimate in response to this request.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO      22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						752				
Total:						752				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Alan Barnosky						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number   202-564-0000				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-564-8316				
						FAX Number:				

## **EPA CONTRACT NUMBER EP-W-12-013**

### **Statement of Work**

Work Assignment Number: 2-11

Work Assignment Amendment Number: 0

Title: **Identification of Non-Hazardous Secondary Materials (NSHMs) That Are Solid Waste, Contaminant Analyses, and Related Work**

Work Assignment Manager (WAM):

Jesse Miller

Address:

OSWER/ORCR /MRWMD  
Mail Code 5304P  
1200 Pennsylvania Ave. N.W.  
Washington, D.C. 20460

Telephone:

(703)-308-1180  
(703) 308-5268 (front office)  
(703) 308-7903 (FAX)

### **BACKGROUND:**

The United States Court of Appeals for the District of Columbia Circuit vacated and remanded two U.S. Environmental Protection Agency (EPA or the Agency) rules promulgated under the CAA — The Commercial and Industrial Solid Waste Incineration definitions rule (“Definitions Rule”), issued under CAA section 129, and the Industrial Boilers Maximum Achievable Control Technology (MACT) standards rule (“Boilers Rule”), issued under CAA section 112. The court concluded that EPA erred by excluding units that combust solid waste for the purposes of energy recovery from the Definitions Rule and including such units in the Boilers Rule. In response to the court’s decision, EPA is preparing to establish new standards under CAA sections 112 and 129 for the various units subject to each section.

As part of the development of new standards under CAA sections 112 and 129, EPA must establish under RCRA, what non-hazardous secondary materials constitute “solid waste.” This is necessary because, under the court’s decision, any unit combusting any “solid waste” must be regulated as a “solid waste incineration unit,” regardless of the function of the combustion device. If a non-hazardous material is not a “solid waste” under RCRA and such material is burned for fuel or used as an ingredient in a combustion manufacturing process, then under the court’s decision, the combustion unit would properly be regulated pursuant to section 112 of the CAA. Alternatively, if such material is a “solid waste” under RCRA, and is burned for fuel value or used as an ingredient in a manufacturing process and such ingredient is combusted, then the unit must be regulated under section 129 of the CAA.

In March, 2011, the Final Rule: Identification of Non Hazardous Secondary materials that are Solid Waste was signed. A final rule identifying targeted revisions to the March 2011 rule was issued in February 2013. ORCR is currently in the process of implementing those rules.

### **SCOPE OF THIS WORK ASSIGNMENT:**

The purpose of this work assignment is to provide for necessary analytical and other technical support for implementation of the final rule. This Work Assignment may also include contaminant data analysis, and data quality assessment. Project coordination, attendance at Agency and public meetings, project communication, and outreach are also within the scope of this work assignment.

### **WORK STATEMENT:**

#### Task 1. Work Plan, Progress Reports and Budget

Within twenty (20) days of receipt of this work assignment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: [http://www.epa.gov/quality/qa\\_docs.html](http://www.epa.gov/quality/qa_docs.html)

As part of the monthly progress reports for this Work Assignment, the Contractor shall provide a summary of all data quality activities conducted during each month.

No confidential business information (CBI) shall be collected or used under this Work Assignment. However, proprietary data may be used following written approval from the COR.

Contractor travel is authorized under this Work Assignment. The contractor shall budget for no more than two overnight trips for up to two persons, round trip from Boston to Washington, D.C. Any travel will have to be authorized by the COTR in advance.

#### Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

#### Task 2. General Analytical Support

The project addressed under this Work Assignment Amendment: **Identification of Non-Hazardous Secondary Materials That Are Solid Waste Analyses**, is an action that requires a wide range of analytical support including evaluation of contaminant sampling data from

NHSMs, and a comparison of the contaminant concentration levels in those NHSMs to levels in traditional fuels including: coal, oil, biomass and natural gas. The Agency also anticipates the need to assess heretofore unknown issues, materials, or industries that may be impacted by the action. These assessments may require data collection and assessment, new research and analysis, or related supporting activities.

An understanding of the contaminant comparison methodologies described in the preamble to the Feb 7, 2013 NHSM final rule (78 FR 9111) is expected. In addition, part of this task is to build on the framework in the preamble and to be able to apply contaminant comparisons on a case-by-case basis. Novel issues will have to be resolved pertaining to contaminant comparison methods acceptable for different instances. This includes an understanding of when it is acceptable to group contaminants, an understanding of acceptable statistics when comparing ranges, etc.

Under this Task, the contractor shall be prepared to assess unexpected issues and provide research, support, and documentation, as identified through a Technical Directive (TD). This Task also includes related support needs such as scoping papers, summary papers, and briefings.

This task will include a summary of NHSM rulemaking comments, a categorization of NHSM rulemaking comments, and development of response to those comments (integrating EPA responses as appropriate into a response package).

All work under this Task shall be initiated through a Technical Directive (TD). The contractor shall budget for approximately six (6) TDs under this Task.

#### Deliverable(s) and Schedule:

There shall be separate draft and final deliverables for each Technical Directive received under this task. These deliverables shall be in e-mail, memo, paper, or briefing format, as appropriate for the material and requirements. Tables and charts shall be included in all deliverables as appropriate to ensure presentation clarity and ease of understanding. (All charts shall be in an editable format.) The draft deliverables shall be due to the COR no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information. The final deliverable(s) shall be due to the COR no later than five (5) Agency working days following contractor receipt of all written COR comments on the draft document(s).

<b><i>SCHEDULE OF DELIVERABLES</i></b>
--

TASK NUMBER and DELIVERABLE	WORK ASSIGNMENT DUE DATES	
	DRAFT	FINAL

<u>Task 2: General Analytical Support</u>	
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[illegible]

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000004				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			Ex- IM				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan dated 10/29/14 with a Level of Effort (LOE) of 243 hours and \$21,176.05 (b)(4) cost (b)(4) fee). This includes a no cost increase of 20 hrs. The new LOE for this WA is now 772 hrs. The new WA total is now \$73,348.04 (b)(4) cost (b)(4) fee). The contractor is not authorized to go over the ceiling for this WA.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO      22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:		752		
04/30/2012   To   04/29/2015										
This Action:						20				
Total:						772				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Alan Barnosky						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number   202-564-0000				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:   703-605-0509				
						FAX Number:   703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name   Christie M. Deskiewicz						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:   202-564-3316				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000005				
Contract Number EP-W-12-013			Contract Period   04/30/2014   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			Haz Waste Import/Export				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to change the Work Assignment Manager, (WAM) from Alan Barnosky to Phuc Phan.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO      22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 772				
04/30/2014   To   04/29/2015										
This Action:						0				
Total:						772				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name    Phuc Phan						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number    703-306-1013				
						FAX Number:				
Project Officer Name    Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    703-605-0509				
						FAX Number:    703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name    Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    202-564-8316				
						FAX Number:				



<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-12				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000006				
Contract Number EP-W-12-013		Contract Period   04/30/2012   To   04/29/2015		Title of Work Assignment/SF Site Name						
		Base                      Option Period Number      2		Haz. Waste Export/Import						
Contractor INDUSTRIAL ECONOMICS, INCORPORATED			Specify Section and paragraph of Contract SOW							
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval			Period of Performance  From   04/30/2014   To   04/29/2015							
Comments: The purpose of this amendment is to approve a no cost level of effort (LOE) of 65 hours. This action also adds 112 additional LOE which equals to (b)(4) (cost) (b)(4) (fee). An Executive Order requires EPA to publish the final rule in the Federal register by June 2015. The new approved total ceiling is (b)(4) (Cost) (b)(4) (Fee) = \$83,290.75, totaling to 949 LOE.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO      22                      Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 0						
04/30/2012   To   04/29/2015										
This Action:				949						
Total:				949						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name    Phuc Phan						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number    703-306-1013				
						FAX Number:				
Project Officer Name    Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    703-605-0509				
						FAX Number:    703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name    Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:    202-564-8316				
						FAX Number:				

**EPA**United States Environmental Protection Agency  
Washington, DC 20460**Work Assignment**

Work Assignment Number

2-14

☐ Other ☒ Amendment Number:*Base*

Contract Number

EP-W-12-013

Contract Period 04/30/2012 To 04/29/2015

Base

Option Period Number 2

Title of Work Assignment/SF Site Name

Fin. Assur. Rule - CERCLA 108

Contractor

INDUSTRIAL ECONOMICS, INCORPORATED

Specify Section and paragraph of Contract SOW

Purpose:



Work Assignment



Work Assignment Close-Out



Work Assignment Amendment



Incremental Funding



Work Plan Approval

Period of Performance

From 06/26/2014 To 04/29/2015

Comments:

This action is to initiate WA 2-14 titled "Support for Financial Assurance Rule" with an Level of Effort, (LOE) of 390. Scott Palmer is appointed as the Work Assignment Manager, (WAM) and Phuc Phan is appointed as the alternate WAM. The statement of work is attached. The contractor shall submit a work plan/cost estimate.



Superfund

## Accounting and Appropriations Data



Non-Superfund

SFO  
(Max 2)

22

Note: To report additional accounting and appropriations data use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

## Authorized Work Assignment Ceiling

Contract Period:

04/30/2012 To 04/29/2015

Cost/Fee:

LOE: 0

This Action:

390

Total:

390

## Work Plan / Cost Estimate Approvals

Contractor WP Dated:

Cost/Fee:

LOE:

Cumulative Approved:

Cost/Fee:

LOE:

Work Assignment Manager Name Scott Palmer

Branch/Mail Code:

Phone Number 703-308-8621

FAX Number:

(Signature)

(Date)

Project Officer Name Shannon Sturgeon

Branch/Mail Code:

Phone Number: 703-605-0509

FAX Number: 703-308-7903

(Signature)

(Date)

Other Agency Official Name

Branch/Mail Code:

Phone Number:

FAX Number:

(Signature)

(Date)

Contracting Official Name Eulvid Rocque

Branch/Mail Code:

Phone Number: 202-564-8316

FAX Number:

(Signature)

(Date)

**Statement of Work**  
**Work Assignment No. 2-14**  
**EPA Contract #: EP-W-12-013**

1. **TITLE:** CERCLA 108(b) – Economics Support for Financial Assurance Rule
2. **PERIOD OF PERFORMANCE:** Date of CO signature through April 30, 2015
3. **WORK ASSIGNMENT MANAGER:** **Scott Palmer, Ph.D.**  
Economics and Risk Analysis Staff  
Office of Resource Conservation & Recovery  
  
Mailing Address:  
US Environmental Protection Agency  
MC 5305-P  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
  
Phone: 703-308-8621  
E-mail: [palmer.scott@epa.gov](mailto:palmer.scott@epa.gov)

**Alt WAM:**

**Phuc Phan**  
Economics and Risk Analysis Staff  
Office of Resource Conservation & Recovery  
  
Mailing Address: Same as above  
Phone: 703-306-1013  
E-mail: [phan.phuc@epa.gov](mailto:phan.phuc@epa.gov)

4. **BREIF BACKGROUND ON PROJECT AND PRIOR CONTRACT SUPPORT:**

USEPA has been involved in significant ongoing analyses needed for promulgation of financial assurance regulations under CERCLA, 108(b). Substantial prior work has already been completed under former Work Assignments (WA's) with Industrial Economics (IEc). This work has been conducted on an ongoing basis through the contract period of performance ending on April 30, 2014.

Specific tasks that have already been conducted are thoroughly outlined in the Scopes of Work and Approved IEc Work Plans for WA #B-7 and WA #1-14 of this contract, as well as numerous other prior WA's associated with the CERCLA 108(b) Rulemaking.

## **5. STATEMENT OF WORK FOR WA #2-14:**

This WA is being utilized to reinitiate necessary economic analyses for the CERCLA 108(b) regulatory development process, subsequent to a recent de-scoping exercise that took place at the end of the contract period of performance in April of 2014. In addition, a new and aggressive project schedule has recently been established for this rulemaking, which may merit much more work over the period of this work assignment request. In order to produce the analyses necessary to support rule development and all of the steps associated with the Action Development Process, much of this work may also have to be conducted on a fairly rapid turnaround.

There is a wide array of analyses needed for this rule, and this work assignment therefore seeks to accommodate this with a scope of work comprised of several broadly defined tasks. These tasks together seek to cover the full breadth of analyses needed to assess the regulatory and economic impacts for the rule (subject to the limits of available data and funding). Such tasks will include more immediate high priority analyses needed earlier in the over rulemaking schedule, versus longer term research needs (some of which will be identified as more decisions are made about the specific content and requirements to be set forth in the rule).

Lastly, all work conducted under this Work Assignment shall be performed in concert with related tasks separately requested under Tasks 1 through 5 of WA# 2-19. All data, analyses, and findings generated to meet the SOW for WA# 2-14 and WA# 2-19 are to be shared and taken advantage for the purposes of both work assignments as appropriate and feasible.

[Note: Analyses of immediate need shall however represent typical contractor support services pertaining to regulatory impact analyses (RIA) necessary for rule writing and promulgation. As such, amendments may be added to this work assignment in order to continue and/or add similar types of contract services which may be needed on an ongoing basis over the duration of this rulemaking.]

### **Task 1: Work Plan and Budget Management**

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM (and/or the Alternate WAM). The contractor shall maintain at least weekly communication with the EPA WAM and Alternate WAM in order to share any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities achieved throughout the work assignment.

## **Task 2: Analyses Relevant to HLRIA and the Selection of Subclass(es) to be Regulated**

The internal 108(b) Team for the Office of Resource Conservation and Recovery (ORCR) and Agency-level 108(b) Workgroup have been struggling with the task of selecting a subclass of facilities within the Mining and Mineral Processing sectors which will be ultimately chosen for regulation under CERCLA 108(b). This process involves identifying which components of these sectors represent the “highest level of risk of injury” in accordance with the CERCLA 108(b) statute, and the analyses for this process has come to be referred to by the Acronym of HLRIA. To support this effort, the contractor has already conducted extensive analyses including for example:

- 1) Developing historical response cost estimates for CERCLA sites;
- 2) Collecting data on FA amounts already in place; and
- 3) Conducting regressions to identify variables correlated with historical response costs.

Results from these analyses have been documented and organized into spreadsheets, graphs, and histograms for the purpose of packaging and presenting these findings for the project team and workgroup. This information is also being organized together with other pertinent risk-related data for purposes of selecting a final subclass of facilities to be regulated under this subject rule.

While substantial data has already been compiled and is now available to aid in this HLRIA decision, there are additional analyses that could further bolster the ultimate decision. In part, these supplemental analyses would help to fill gaps and respond to concerns expressed by team and workgroup members. Task 2 is designed to meet this need, and help address ongoing concerns and questions. Additional analyses to be conducted are as follows:

- I. Based on the analyses conducted so far, spreadsheets prepared for the HLRIA process reveal results that stand out as atypical relative to the results overall. There are specific sites within different commodity groups that need to be investigated further. For example, there would appear to be a particular aluminum mine and/or processor where there was an uncharacteristically high natural resource damage (NRD) settlement. It would be helpful to identify this site and research it more thoroughly to document the basis for this “outlier”, and whether the instance is typical for aluminum mines and/or processors. For all such instances in the dataset, a very brief case study is to be written where feasible, for purposes of explaining and documenting any unique circumstance associated with all data elements that clearly stand out as potential “outliers”.
- II. Current results reveal substantial differences among mines vs. processors, regardless of their associated commodity group. These differences need to be researched and documented in a thorough summary white-paper that talks about historical changes and past versus current industrial practices, market conditions, regulatory requirements, and environmental controls, for all of the commodity groups being evaluated as part of our HLRIA analyses. This Task is being requested as a precursor to the SOW outlined separately under Task 5 of WA# 2-19. These analyses are focused more on helping to more immediately assist with the HLRIA effort to determine the appropriate subclasses to include within the rule. The minor preliminary results from this task are to also be taken advantage of in the meeting the SOW for Task 5 of WA# 2-19.

Notes:

- The contractor is requested to evaluate the feasibility and fruitfulness of the above analyses, relative to our proposed objectives. The contractor is further called upon to remove, modify, or recommend changes to the above list based on their expertise, and document their recommendations in their proposed work plan.]
- The total amount of time and workload necessary for Task 2-I and 2-II related analyses are together anticipated not to exceed more than 1/3rd of the overall allotted LOE allotted for this WA.

**Task 3(a) & 3(b): Data Management and Modification Needs**

**Task 3(a): Quality Control and Reconciliation of CERCLA 108(b) Data**

Substantial quantities of CERCLA 108(b) related data have been collected since the inception of this project. Because many updates, revisions, and modifications of this data have taken place, Task 3(a) calls for a review of all relevant data on record in order to ensure that only the latest versions of data are used for all future analyses.

This task shall involve establishing a retrospective timeline for prior iterations of data collection efforts for all types of relevant data. Relevant data shall include for example; CERCLIS data, Office of Enforcement and Compliance Assurance (OECA) enforcement and settlements data, GIS locational data, natural resource damage (NRD) settlement amounts, ATSDR data, amounts of existing financial assurance, data extracted from CERCLA site summaries, etc. For example, elements of data to be covered in this documentation effort shall include; collection dates, original data sources, electronic storage information including database locations and file names, and data definitions, as well as notes and summary descriptions. Furthermore, this task shall encompass all relevant datasets developed to date for this rulemaking, including data compiled by other outside contractors, and EPA team members.

Please note that a very similar yet distinct task is separately being conducted through a separate contract. This separate contract effort will be used to prepare a comprehensive compilation of data collected to date and to then package this data for ongoing processing by EPA. Task 3(a) will commence at the direction of the WAM, once the final deliverables are received from this separate contractor and it makes sense to proceed with this task. At such time, the WAM will provide all such data, and/or the contact information otherwise needed to ensure that the contractor can fulfill this part of the subject scope of work.

Once this initial quality control and documentation phase is complete, and all project data is in hand, all such data will be uploaded and linked as feasible within a master ACCESS database or associated databases. Once the quality control and reconciliation of existing data is finalized and updated in ACCESS, all such files will be distributed to ORCR, as well as all contractors affiliated with research for the rule, to help ensure that everyone is working with the same data.

### **Task 3(b): Review, Update, and Modification of Prior Economic Data and Analyses**

Another priority for further analyses is to solicit review and concurrence, both internal and external to ORCR, on the economics related data collection, analyses, methodologies, statistics, and findings achieved to date. The OSWER Office of Superfund Remediation and Technology Innovation (OSRTI) has made a commitment to increase their involvement and the amount of staff resources they make available to provide their expert review of our analyses. The Agency Workgroup for the rule has also become more involved with the review of project materials. As such, this task calls for ensuring that there is sufficient contract support for analytical briefings that may be necessary for stakeholders such as OSRTI, the Agency Workgroup, and OECA. As such, the contractor shall budget for one face to face meeting in DC in order to participate in case such a need arises..

Based on potential new information and/or input from the Agency Workgroup, modifications to prior analyses may be necessary. If so, such changes and/or updates shall also be conducted under this Task. The contractor should assume that they will need to be available in order to field questions about their chosen assumptions, methods, and findings covering the array of work conducted to date. Any responses shall be prepared by the contractor and provided to the WAM for distribution. EPA also asks that pertinent contractor staff be made available by phone in order to readily resolve questions and facilitate necessary solutions when and where feasible.

[Note: The total amount of time and workload necessary for responding to questions and comments as well as subsequent modifications to prior analyses should be assumed to not exceed more than 1/3rd of the overall allotted LOE estimated for this WA.]

### **Task 4: Draft Assessment of Economic and Regulatory Impacts**

Under this task, the contractor shall first reassess and familiarize themselves with the current status and key features of the draft rule. The contractor shall also identify critical gaps and remaining rule features/decisions yet to be resolved. This progress assessment shall be accompanied by recommendations for next steps and analyses of highest priority for estimating the regulatory impacts associated with the rule. This will be used to direct future work assignments and establish better estimates of the costs and benefits of the rule. Such work may include the following analyses, as previously identified under WA #B-7.

- I. Utilization of newly established definitions for mining and processing, in concert with alternative potential commodity subclasses, in order to establish a preliminary listing of currently operating facilities likely to be regulated under these definitions.
- II. Assembling preliminary draft estimates of the monetary costs (and potential tradeoffs and benefits) associated with all alternative Financial Assurance mechanisms being considered, so that a Draft Economic Impact Analysis of the costs and benefits of the can be prepared in time to be available for in time for commencement of the SBA Review (SBAR Panel) Process related to the Regulatory Flexibility analyses for the rule. [Notes: Such dates are projected and may change. Furthermore, improved cost estimates will likely be needed, following ongoing refinement of the final financial assurance requirements chosen for the rule.]



- III. Drawing on Industry Profiles and additional firm level data (including sales, revenues, number of employees, etc.), the contractor shall also conduct an analysis of “small entity” impacts associated with the proposed rule, in support of the necessary Reg. Flex. analysis and potential convening of SBAR Panel.
- IV. Selection of Fixed Financial Assurance amounts that can be used for a Fixed FA Option under the rule. An approach and supporting arguments are to be established in cooperation with the Agency, for the selection of Fixed FA amounts, on the basis of commodity categories currently being identified by EPA. It is assumed that the selection of such amounts are to be based on Historic Response Cost estimates and Existing FA data, as well as associated findings from Statistical Regressions that have already been (or are concurrently being) collected/conducted.
- V. Formulation of an approach and supporting arguments are also to be established in cooperation with the Agency, for the selection of candidate approaches that would allow for “Adjustments” to the Fixed FA targets. Such an approach would be used to allow Fixed FA amounts to be tailored to accommodate for specific site features/characteristics, thereby allowing a more equitable amount to be established for certain facilities. For example, such a scheme could thereby allow for higher vs. lower adjusted FA amounts at facilities depending upon whether their respective site characteristics are or are not shown to be correlated with higher liability risks and response costs. Such an approach will require the identification of variables shown to be correlated with historical response cost estimates and existing FA amounts, as well as other potential dependent variables. Such adjustments are likely to be based on geologic, geographic, and/or process/management characteristics at any given facility (e.g. adjustments allowed for variations in disturbed acreage and proximity to surface water, etc... across facilities features). As such, independent variables of interest include, but are not limited to, Disturbed Acreage, Depth to Groundwater, Distance to Surface Water, Type of Commodity, On-site Processes (heap leach / no heap leach...), Pro-environmental Management Traits (ISO certification, ...), etc.
- VI. Derivation of draft estimates of the costs attributable to the FA amounts identified above. The costs of attaining FA are to be estimated by utilizing the amounts from 1) and 2) above, along with all data and analytical findings developed to date (e.g. Hist. Resp. Cost estimates, Cost of Mechanisms, Regression findings, Existing FA amounts already in place, Identified HRM Facilities to be Regulated universe and their respective financial data, Cost of Financial Instruments, Discounting Findings, etc.).

[NOTE: Much of the work to be conducted under Task 4 will be dependent upon the results of concurrent decision making and analyses that may be underway or ongoing. Therefore, portions of the work under Task 4 may need to wait until EPA is able to issue a Technical Directive.]

Also provided on the following 2 pages are a rough draft of the preamble for the rule along with a listing of the major milestones on the schedule for the rule. This material shall serve as additional information for the contractor as they develop their proposed work plan.



## I. Executive Summary

- A. Purpose of the Regulatory Action
  - 1. The Need for the Regulatory Action, and How the Action Will Meet That Need
  - 2. Succinct statement of the legal authority for the regulatory action
- B. Summary of the Major Provisions of the Regulatory Action
- C. Costs and Benefits of the Regulatory Action

## II. Authority

## III. Background Information

- A. Overview of CERCLA Section 108(b)
- B. Earth Justice Litigation
- C. Hardrock Mining Federal Register Notice
- D. Additional Classes Advance Notice of Proposed Rulemaking
- E. Comments Received on the Additional Classes ANPR
- F. Community Engagement Initiative

## IV. Summary and Discussion of Proposed Provisions

- A. Summary of the Proposed Rule
- B. Subpart A – General Facility Requirements
  - 1. Purpose, Scope, and Applicability – Section xxx
  - 2. Definitions – Section xxx
  - 3. Notification Requirements – Section xxx
  - 4. Establishing Financial Responsibility Levels
    - 5. General Information Submission and Recordkeeping Requirements -- Section xxx
  - 6. Submission and Review of Financial Responsibility Instruments -- Section xxx
  - 7. Maintenance of Financial Responsibility Instruments -- Section xxx
  - 8. Payment of the Financial Responsibility Instruments – Section xxx
  - 9. Incapacity of owners or operators, guarantors, or financial institutions – Section xxx
- C. Subpart B – Wording of the Instruments
  - 1. Letter of Credit -- Section xxx
  - 2. Surety Bond -- Section xxx
  - 3. Insurance -- Section xxx
  - 4. Financial Test -- Section xxx
  - 5. Corporate Guarantee -- Section xxx
- D. Subpart C – Administrative Procedures (Include Public Involvement)
  - 1. Appeal of Agency Decisions -- Section xxx
  - 2. Release from Financial Responsibility Requirements -- Section xxx
  - 3. Deferral of Financial Responsibility Requirements – Section xxx
- Subpart D – E – [Reserved]
- E. Subpart F – Hardrock Mining
  - 1. Applicability -- Classes of Mining Facilities Subject to the Rule
  - 2. Definitions Applicable to this Part– Section xxx
  - 3. Cost Estimation Requirements – Section xxx
  - 4. Information Submission and Recordkeeping Requirements
- F. Subpart G – Mineral Processing
  - 1. Applicability -- Classes of Mineral Processing Facilities Subject to the Rule
  - 2. Definitions Applicable to this Part– Section xxx
  - 3. Cost Estimation Requirements – Section xxx
  - 4. Information Submission and Recordkeeping Requirements
- G. Relationship to State Requirements
- H. Relationship to Other Federal Requirements

## V. Administrative Requirements for this Proposed Rulemaking

- A. Executive Order 12866 (plus all other remaining EOs)

Order of Anticipated Milestones	Projected Duration <sup>1</sup>
Develop SBREFA convening documents with SBA	60
Formal Notification of SBRFA Sent to SBA/OMB	1 day
SBREFA Pre-Panel Outreach meeting	1 day
SBREFA Panel convened – 60 day RFA clock begins	1 day
SBREFA outreach meeting	1 day
SBREFA panel report final – 60 day RFA clock ends	1 day
Workgroup receives Final Agency Review (FAR) rule package	15 days <sup>2</sup>
FAR meeting	1 day
To OP to prepare/submit package for OMB Review	14 days
OMB Review	90 days
ORCR sends package to OSWER IO	7 days
OSWER sends to OP for Signature Review	7 days
OP sends to OEX to prepare for signature	7 days
Sign/send to Federal Register office	14 days
Proposed Rule published in FR	1 day
<sup>1</sup> Calendar days unless otherwise specified.	
<sup>2</sup> Working days.	

## 6. **CONTRACTOR QA AND DATA DELIVERABLE REQUIREMENTS**

The contractor shall comply with all applicable requirements of the contract, including compliance with all quality-assurance standards, provision of monthly invoices detailing progress and for notifying the WAM of the status of remaining funds, and other such requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition, the contractor shall make use of the following in developing the appropriate QA/QC requirements: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>. Furthermore, all data and supporting documents used in the performance of this contract and all associated analyses shall be provided to EPA at the completion of the work, as well as at any such time that it is requested by the WAM or Alt. WAM.

## 7. OVERALL SCHEDULE FOR DELIVERABLES

<b>Task and Deliverable for WA # 4-41</b>	<b>Estimated Delivery (days include weekdays and weekends)</b>
<b><u>Task 1 – Workplan and Budget Management</u></b>	
<u>Deliverable 1</u> : Workplan and Budget	20 days after receipt of the approved work assignment.
<b><u>Task 2: HLRIA Analyses &amp; Selection of Subclass(es)</u></b>	
<u>Draft Deliverable 2-I</u> : Case Studies for Data Outliers	21 days after Work Plan Approval
<u>Draft Deliverable 2-II</u> : White Paper on Mines vs. Processors	21 days after Work Plan Approval
	(All final deliverable due within 7 days of WAM comments on Drafts.)
<b><u>Task 3: Data Management and Modification Needs</u></b>	
<u>Deliverable 3(a)</u> : Submission of Reconciled Access Database with latest 108(b) data compiled for future ongoing analyses	14 days after receipt of TD with CO Signature
<u>Deliverable 3(b)</u> : Modifications to Prior Analyses	Ongoing task – no set deliverables required. Modification to earlier analyses will be documented in Monthly Progress Reports.
	(All current versions of Access Database updates are to be provided upon request.)
<b><u>Task 4 – Regulatory Impact Analyses related work</u></b>	
<u>Draft Deliverable 4</u> : Progress Assessment and Next Steps	Within 14 days of above requested analytical modifications, or 15 days after receipt of TD with CO Signature
<u>Other possible Analyses as requested and feasible</u>	
<u>Deliverable 4-I</u> : Listing of Currently Operating Facilities, likely to subject to rule in accordance with final decisions regarding HLRIA, as well as necessary definitions for mines and processors	28 Days after receipt of TD with CO Signature
<u>Deliverable 4-II</u> : Draft RIA Analyses – early estimates of comprehensive cost impacts of the rule in accordance with Exec. Order 12866 (needed for SBREFA & SBAR Process.)	28 Days after receipt of TD with CO Signature
<u>Deliverable 4-III</u> : Draft SBREFA Analyses to Support the SBREFA & SBAR Panel Process	28 Days after receipt of TD with CO Signature
<u>Deliverable 4-IV</u> : Selection of Options for Fixed FA Adjustments	28 Days after receipt of TD with CO Signature
<u>Deliverable 4-III</u> : Draft Estimates of the Costs of selected FA amounts (including cost of instruments and collateral, etc...)	28 Days after receipt of TD with CO Signature
	(All final deliverable due within 7 days of WAM comments on Drafts) (Schedules for project milestones such as the SBAR Panel Process are subject to change.)

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-14				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number       2			CERCLA 108b - Econ Support				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   06/26/2014   To   04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 07/16/2014 with Level of Effort, (LOE) of 390 hours and \$38,878.39 (b)(4) cost (b)(4) Fee). The contractor is not authorized to go over the approved ceiling for this work assignment without approval from the Contracting Officer.										
<input checked="" type="checkbox"/> Superfund                      Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO    22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 390				
04/30/2012   To   04/29/2015										
This Action:						0				
Total:						390				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Scott Palmer						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number   703-308-8621				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-564-8316				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-15				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015 Base                      Option Period Number    2			Title of Work Assignment/SF Site Name Economic Benefits of RCRA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance  From   04/30/2014   To   04/29/2015				
Comments: This action initiates WA 2-15 entitled "Economic Benefits of RCRA". Scott Palmer is appointed the WAM and Rachel Horton is appointed the alt. WAM. The LOE for this WA is 578 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <span style="border: 1px solid black; padding: 2px;">22</span> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						578				
Total:						578				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Scott Palmer						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)                      (Date)</div>						Phone Number   703-308-8621				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)                      (Date)</div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)                      (Date)</div>						Phone Number:				
						FAX Number:				
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)                      (Date)</div>						Phone Number: 202-564-8316				
						FAX Number:				

**Statement of Work**  
**Work Assignment No. 2-15**  
**EPA Contract #: EP-W-12-013**

1. **Title:** Economic Benefits of RCRA Regulatory & Voluntary Programs
2. **Period of Performance:** Date of CO signature through 4/29/2015
3. **Work Assignment Manager:** **Scott Palmer**  
Economics and Risk Analysis Staff  
Office of Resource Conservation & Recovery

Mailing Address:  
US Environmental Protection Agency  
MC 5305-P  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Phone: 703-308-8621  
E-mail: [palmer.scott@epa.gov](mailto:palmer.scott@epa.gov)

**Alt WAM:**

**Rachel Horton**  
Phone: 703-305-0894  
E-mail: [horton.rachel@epa.gov](mailto:horton.rachel@epa.gov)

4. **Background and Scope:**

The Office of Resource Conservation and Recovery (ORCR) is responsible for administering and tracking the performance of numerous voluntary initiatives and regulatory programs under its authority. Such programs are primarily focused on the proper management and disposal of both municipal and hazardous waste. ORCR routinely conducts program impact evaluations and benefit assessments for components of its overall program when feasible. However, the current effort seeks to produce a more succinct compilation of these program characteristics and impacts. In doing so, the requested analyses are intended to generate more defensible findings, while also covering the entire ORCR/RCRA program, so that this information will be more readily available for a wide array of uses both internal and external to the Agency.

To meet this objective, ORCR currently has a Work Assignment (WA # 1-15) and associated additional amendment in place to characterize the size, reach, and beneficial impacts associated with ORCR/RCRA Program(s) (in terms of, for example, waste stream types and quantities, numbers of cleanups completed at corrective action sites, population within 1 mile of sites, etc.). During the initial phase of this work, the aim has been to help better portrait the full breadth and extent of the program. These analyses are intended to put a solid foundation in place, and help produce key inputs necessary, for further higher level analyses. In this vein, WA #1-15 also calls for additional levels of analysis, to investigate and utilize relevant available data and predictive modeling tools to highlight qualitative and quantitative program-wide impacts and benefit estimates where feasible.

As noted in the original Scope of Work (SOW) for WA # 1-15, this type of analyses occurs on an ongoing basis and some significant work has already been conducted in this area. This body of prior work is currently being reviewed and utilized where appropriate in the analyses and work products now underway for WA # 1-15. [Note: More information on prior relevant analyses in this area is referenced in the original SOW and associated deliverables for WA #1-5.]

Under the approved Work Plan for WA # 1-15, there are 4 Tasks including: 1) Work Plan and Budget Management; 2) Scoping Assessment of Economic Benefits of ORCR Programs; 3) Estimation of Quantifiable Benefits of the ORCR Programs; and 4) Development of Outreach Materials Highlighting the Benefits of the ORCR Program. To achieve these tasks, the work plan included the development of a plan/outline aimed at flushing out the analyses and vehicles by which we would accomplish the overall objectives of the work assignment. The resulting plan, known as the “Quantitative RCRA Benefits Assessment – Annotated Outline (dated Jan. 6, 2014), includes recommendations for how to best capture, characterize, and advertize the benefits that jointly stem from our programs. This plan outlines necessary steps forward which have been closely relied upon for determining what analyses are most appropriate for the project.

At the request of the OSWER Assistant Administrator, ORCR is under a very tight timeline and is expected to complete these subject analyses as soon as possible. These analyses are therefore proceeding very quickly, and roughly 90% of the approved work has been completed in only a few short months. More specifically, a major portion of the data collection, analyses, and associated documentation called for in Phases 1 and 2 of the Jan. 6th Plan (per Task 2 of WA #1-15) has been finished. In addition, a bulk of the analyses and deliverables approved under Task 3 of WA #1-15 are nearly complete. Task 4 calls for the development of “Outreach Materials Highlighting the Benefits of the ORCR Program”. As such, Task 4 is still underway, and these materials will not be finalized until more results from ongoing and future analyses are available.

The purpose of WA #2-15 is to request further analyses from the contractor in order to expand upon the work already conducted to date under WA #1-15. The following Section 5 covers the State of Work and simply calls for the submission of the necessary work plan and proposed budget by the contractor. Tasks 2 and 3 then outline the additional analyses that are being requested.

## **5. Statement of Work: The contractor shall conduct the following tasks:**

### **Task 1: Work Plan and Budget Management**

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM. The contractor shall maintain at least weekly communication with the EPA WAM of any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

The Contractor shall describe in the work plan, how the Contractor plans to apply quality assurance (QA), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly progress/invoice reports to the WAM for this work assignment. Because the types of “environmental data” involved in this SOW may mostly come from existing secondary sources which have already been subject to QA (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QA activities for this SOW may only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet calculation formulae.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities met throughout the work assignment.

### **Task 2: Follow-on Analyses and Next Steps Requested in Relation to Analyses Conducted to Date**

Requested first under Task 2, is an update of the existing project plan/outline incorporating the steps and turnaround time associated with the expanded analyses and next steps that will be conducted under this Amendment (both for Task 2 and Task 3 below). The proposed analyses expand upon the existing analyses and shall largely involve the use of readily available data and methods which were identified during the performance of analyses conducted to date under Phases 1 & 2 of the Project Plan/Outline and as presented in briefing for ORCR management in April of 2014. Specific examples of these “expanded analyses” and “next steps” to be conducted under this amendment are outlined as follows:

#### **MORE IMMEDIATE FOLLOW-ON ANALYSES & QA FIXES**

1. Verify, update, and reconcile preliminary/not QA’ed values in the Briefing:



- Recycling and LCA data: update and verify values from EPA internal presentation; update commodity prices; review, refine, and reconcile WARM results; examine whether attribution progress occurred;
  - C&D estimate needs to be updated.
  - P. 11: Cheryl will get us data on food recovery. Also, get information from the Methane Reduction Initiative.
  - Check \$700 million in annual impacts/benefits of fly ash and FGD gypsum reuse (p.12). Barnes said we used an estimate of over \$1 billion in a briefing for the Administrator.
  - Reference the precious metals benefits?
  - Caveat or note for the Beneficial Use section (BU) section on CCRs: we are promoting the safe reuse of CCRs.
  - P. 14 Benefits of programs including F019 Deregulation – Can we do this for zinc fertilizer, scrap metal, circuit boards, and chat materials?
- Update and improve upon the 2005 Financial Assurance results;
  - In the Financial Assurance section (p. 9), be specific about the kinds of facilities that require financial assurance – such as MSW facilities. (Are there other types of facilities as well?) Also, hone message in last bullet on p.9—“Financial Assurance is Working”...
- Reconcile CESQG numbers using the latest internal ORCR resolution;
- More closely examine/determine Foundry Sands benefits

## 2. Hedonic property values literature review:

- Further analysis of the property value literature is necessary to see if we can relate it more specifically to our programs.
- Develop better understanding of the impact that cleanup activities have on commercial property values;
  - Barnes is particularly interested in separating out the dis-amenity of having an industrial facility in one’s neighborhood vs. the dis-amenity of having a contaminated industrial facility in the neighborhood.
  - Timmons study hammered by SAB?

## **Deliverables for Task 2:**

The contractor shall produce three deliverables for Task 2. Deliverable 2A shall be a draft update of the existing plan/outline generated from the scoping assessment conducted for the Original SOW for WA # 1-15. Deliverable 2B shall be a Draft Report on the findings of the

expanded analyses conducted for this Task. Deliverable 2C calls for the draft report of results to be finalized and also incorporated into any broader project documents associated with the overall project. [Note: See also the Schedule for Deliverables under Section 6 below.]

### **Task 3: Additional Analyses Requested per Phase 3 of the Existing Project Plan and Established Next Steps**

The analyses conducted to date (as outlined in Phases 1 and 2 of the Project Plan/Outline) have included more basic analyses based on readily available data, that could be more realistically accomplished under the short turnaround and original budget established for the project. Phase 3 of the Project analyses are being requested based on management feedback and interest in obtaining additional findings for the project. Task 3 calls for the contractor to proceed with further analyses as outlined below. Longer term and/or lower priority research shall be conducted, shall approved by the Project COR/WAM depending upon their projected feasibility, timing, and costs, and the availability of commensurate funding.

#### **ANALYSES INTENDED TO STRENGTHEN AND EXTEND BEYOND CURRENT FINDINGS**

1. Additional groundwater analyses:
  - Site location restrictions and their benefits
  - Groundwater remediation costs
  - *Additional human health benefits (new MCLs) (if readily doable at low cost?)*
  - *Improvements at hazardous waste management sites*
2. *Corrective Action and groundwater remediation costs (CERCLIS)*
  - *Estimate avoided sites;*
  - *Rely on previous CCR analysis to estimate groundwater cleanup costs;*
  - *Rely on RTI data to estimate amounts of water protected from leaking UST sites;*
  - *Potentially conduct a case study;*
3. *New Ideas for Analyses and Metrics that could be Highlighted*
  - *Try to find information that would enable us to compare the benefits of our programs against other programs. (Energy Star is one example program)*
  - *Estimate the reduction in virgin materials use due to recycling. (e.g. “trees saved”, barrels of oil equivalents... UG – don’t like this, but want to look at least some opportunities to do this without having it weaken the power of our message!!!?)*

#### **LOWER PRIORITY & LONGER TERM ANALYSES**

1. *Flesh out the sections on RCRA Emerging Issues:*

- *Subcategories to capture special wastes vs. other types of regulatory improvements (new and novel RCRA guidance and regulations)*
  - *Examples of deregulatory work based on new science and technology*
    - *Potentially examine changes in industry structure: utilize the Biennial Report data to evaluate changes in waste management by waste code to investigate whether a relative increase in safety has occurred in the last 20-30 years;*
  - *Process improvement: further quantification of benefits (if available) and examples;*
2. *Land disposal restrictions: evaluate cumulative updated LDR impacts of the LDR rules from the 1980s and early 1990s (similar to groundwater analysis). (Yet to be determined if this is Higher Priority?)*

### **Deliverables for Task 3:**

The contractor shall produce two deliverables for Task 3. Deliverable 3A shall be a Draft Report on the findings of the additional analyses conducted for this Task. Deliverable 3B calls for the draft report of results to be finalized and also incorporated into any broader project documents associated with the overall project. [Note: See also the Schedule for Deliverables under Section 6 below.]

## 6: Overall Schedule for Deliverables

Task and Deliverable	Estimated Delivery
<b>Task 1: Workplan and Budget Management</b> Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
<b>Task 2: Additional Analyses Requested in Relation to Analyses Conducted to Date</b> Deliverable 2A: Update Existing Project Plan/Outline (to include articulation of steps involved with all additional analyses to be conducted for both Tasks 2 & 3) Deliverable 2B: Draft Results of Expanded Analyses Deliverable 2C: Final Report of Task 2 Results and Incorporation of results into Overall Documentation of WA #1-15 Results	1 week after CO signature 3 weeks after WAM comments on Deliverable 2A 2 weeks after WAM comments on Deliverable 2B
<b>Task 3: Additional Analyses Requested per Phase 3 of the Existing Project Plan</b> Deliverable 3A: Draft Results of Additional Analyses Deliverable 3B: Final Report of Task 3 Results and Incorporation of results into Overall Documentation of WA #1-15 Results	30 days after Work Assignment approval. 2 weeks after WAM comments on Deliverable 3A

## 7.) OTHER CONTRACTOR REQUIREMENTS

The contractor shall comply with all applicable requirements of the contract, including compliance with quality-assurance requirements, providing monthly invoices detailing progress and notifying the WAM of the status of remaining funds, and other requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition to the contract requirements for QA, documents that can be of used in developing the appropriate QA/QC requirements are: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>.

All hard copy and electronic data collected for the purposes of analyses under WA # 2-15 and this subject Amendment (other than that data which is publically available) shall be shared with EPA. Similarly, any algorithms, electronic spreadsheets, and/or modeling tools generated by the contractor, for the purposes of analyses conducted to meet the SOW for WA # 2-15 and this subject Amendment, shall be shared with EPA.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number 2-15</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> Other             <input checked="" type="checkbox"/> Amendment Number:           </div> <p style="text-align: right;">000001</p>																																																																					
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<p>Comments:</p> <p>The purpose of this amendment is to approve the contractor's work dated May 20 th, 2014 with Level of Efforts, (LOE) at 578 and cost plus fee at \$57,363.05 cost (b)(4) cost (b)(4) fee. The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.</p>																																																																							
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<p>SFO (Max 2) <span style="border: 1px solid black; padding: 2px 10px;">22</span></p> <p style="text-align: center; font-size: small;">Note: To report additional accounting and appropriations date use EPA Form 1900-69A.</p> <table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Line</th> <th>DCN (Max 6)</th> <th>Budget/FY (Max 4)</th> <th>Appropriation Code (Max 6)</th> <th>Budget Org/Code (Max 7)</th> <th>Program Element (Max 9)</th> <th>Object Class (Max 4)</th> <th>Amount (Dollars)</th> <th>(Cents)</th> <th>Site/Project (Max 8)</th> <th>Cost Org/Code (Max 7)</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>						Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)	1											2											3											4											5										
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<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-15				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
Base			Option Period Number    2							
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's request for a no cost, level of effort increase in the amount of 50 (LOE) to Work Assignment 2-15 dated 12/11/14. The new approved LOE is 628 and Cost/Fee is \$57,363.05. The Contractor is not authorized to go over the approve ceiling without the approval of the Contracting Officer.										
<input type="checkbox"/> Superfund    Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO <span style="border: 1px solid black; padding: 2px;">22</span> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012   To   04/29/2015				0						
This Action:				628						
Total:				628						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Scott Palmer						Branch/Mail Code:				
_____ (Signature)    (Date)						Phone Number   703-308-8621				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)    (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)    (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)    (Date)						Phone Number: 202-564-8316				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-15				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number      2			Highlighting Benefits of RCRA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW none					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: The purpose of this amendment is to add additional level of effort, (LOE) in the amount of 369 hours to this work assignment. The new LOE for this WA is now 997 hours. The statement of work is attached. The contractor shall submit a work plan and cost estimate in response to this request.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO (Max 2) <span style="border: 1px solid black; padding: 2px;">22</span>										
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2										
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 628				
04/30/2012   To   04/29/2015										
This Action:						369				
Total:						997				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Scott Palmer						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number   703-308-8621				
						FAX Number:				
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Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-564-8316				
						FAX Number:				

**Statement of Work**  
**Work Assignment No. 2-15**  
**Amendment # 3**  
**EPA Contract #: EP-W-12-013**

1. **Title:** Economic Benefits of RCRA Regulatory & Voluntary Programs

2. **Period of Performance:** Date of CO signature through 12/31/2015

3. **Work Assignment Manager:** **Scott Palmer**  
Economics and Risk Analysis Staff  
Office of Resource Conservation &

Recovery

Mailing Address:  
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1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Phone: 703-308-8621  
E-mail: [palmer.scott@epa.gov](mailto:palmer.scott@epa.gov)

**Alt WAM:**

**Rachel Horton**  
Phone: 703-305-0894  
E-mail: [horton.rachel@epa.gov](mailto:horton.rachel@epa.gov)

4. **Background and Scope:**

The Office of Resource Conservation and Recovery (ORCR) is responsible for administering and tracking the performance of numerous voluntary initiatives and regulatory programs under its authority. Such programs are primarily focused on the proper management and disposal of both municipal and hazardous waste. ORCR routinely conducts program impact evaluations and benefit assessments for components of its overall program when feasible. However, the current effort seeks to produce a more succinct compilation of these program characteristics and impacts. In doing so, the requested analyses are intended to generate more defensible findings, while also covering the entire ORCR/RCRA program, so that this information will be more readily available for a wide array of uses both internal and external to the Agency.



To meet this objective, ORCR currently has a Work Assignment (WA # 2-15), which was originally initiated under Work Assignment #1-15, in order to characterize the size, reach, and beneficial impacts associated with ORCR/RCRA Program(s) (in terms of, for example, waste stream types and quantities, numbers of cleanups completed at corrective action sites, population within 1 mile of sites, etc.). During these initial phases of work, the aim has been to help better portrait the full breadth and extent of the program. These analyses are intended to put a solid foundation in place, and help produce key inputs necessary, for further higher level analyses. In this vein, this work also calls for additional levels of analysis, to investigate and utilize relevant available data and predictive modeling tools to highlight qualitative and quantitative program-wide impacts and benefit estimates where feasible.

As noted in the original Scopes of Work (SOW) for WA # 1-15 and WA # 2-15, these types of analyses occur on an ongoing basis and some significant work has already been conducted in this area. This body of prior work is currently being reviewed and utilized where appropriate in the analyses and work products now underway for WA # 2-15. [Note: More information on prior relevant analyses in this area is referenced in the original SOWs and associated deliverables to date for WA #1-15 and WA #2-15.]

Under the approved Work Plans for WA #1-15 and WA # 2-15, a plan/outline was developed to flush out the analyses and vehicles by which we would accomplish the overall objectives of the work assignment. The resulting plan, known as the “Quantitative RCRA Benefits Assessment – Annotated Outline (dated Jan. 6, 2014), includes recommendations for how to best capture, characterize, and advertise the benefits that jointly stem from our programs. This plan outlines necessary steps forward which have been closely relied upon for determining what analyses are most appropriate for the project.

The work called for under WA #1-15 and #2-15 is now complete and the available funding has now been fully utilized. The purpose of this Amendment #3 to WA #2-15 is to request further analyses from the contractor. EPA wishes to dedicate additional funds to this project in order to expand upon the work already conducted to date under WA #1-15 and WA #2-15. The following Section 5 covers the Statement of Work for Amendment #3. Task 1 of the scope simply calls for submission of the necessary work plan and proposed budget by the contractor. Tasks 2 and 3 then outline the additional analyses that are being requested under this amendment.

## **5. Statement of Work: The contractor shall conduct the following tasks:**

### **Task 1: Work Plan and Budget Management**

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM. The contractor shall maintain at least weekly communication with the EPA WAM of any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the

work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

The Contractor shall describe in the work plan, how the Contractor plans to apply quality assurance (QA), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly progress/invoice reports to the WAM for this work assignment. Because the types of “environmental data” involved in this SOW may mostly come from existing secondary sources which have already been subject to QA (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QA activities for this SOW may only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet calculation formulae.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities met throughout the work assignment.

## **Task 2: Scoping and Documentation of Management Direction**

Requested first under Task 2, is another brief update of the latest version of the project plan/outline providing a summary description of the work conducted to date, and incorporating the steps and turnaround times associated with any expanded analyses and next steps called for under this Amendment (for Task 2, as well as Tasks 3 and 4 described below). This update shall also take advantage of feedback received from ORCR management during RCRA Benefit project briefings currently scheduled to take place in February of 2015. Briefing materials are in the process of being prepared for these meetings, and these materials will be drawn upon to inform all future work under this work assignment. During these meetings, meeting notes shall also be compiled in order to document important guidance and feedback from management to inform our work as this project moves forward.

### **Deliverables for Task 2:**

The contractor shall produce two deliverables for Task 2. Deliverable 2A shall be a simple compilation of meeting notes capturing the most salient decisions and direction received from management. Secondly, in order to document the current thinking and necessary next steps for the project, the contractor shall prepare a simple update of the existing project plan/outline generated from the scoping assessment conducted for the Original SOW for WA # 1-15. Revisions of these documents will not be called for by the contractor, and both of these deliverables shall be reviewed and finalized by the WAM, in order to conserve limited resources for other key analyses.

## **Task 3: Specific Areas of Analyses and Next Steps of Highest Priority**

The proposed analyses expand upon the existing analyses and shall largely involve the use of readily available data and methods which were identified during the performance of

analyses conducted to date under the existing Project Plan/Outline. All further analyses shall build upon work that has been conducted to and shall include the following areas of analyses:

1. Development of methods to describe and estimate the “Cost and Reach of RCRA”

- *Preliminary work by the contractor has already been conducted on this topic, and summarized in briefing materials prepared for upcoming management meetings referenced above. All future work on this topic will draw from the work conducted to date and information to be gained from management.*

2. Development of methods to describe and estimate the “Benefits of the RCRA Base Program”.

- The overarching regulatory components of RCRA include that of the Corrective Action program, Permitting & Enforcement requirements, and Hazardous Waste Management rules & guidance. Examples of data and analyses anticipated to contribute to this task include:
  - Additional groundwater analyses:
    - Site location restrictions and their benefits;
    - Groundwater remediation costs;
    - *Additional human health benefits (new MCLs) (if readily doable at low cost?); and*
    - *Improvements at hazardous waste management sites.*
  - *Examine analyses conducted for promulgating the RCRA Land Disposal Restrictions: to evaluate cumulative updated LDR impacts of the LDR Rules from the 1980s and early 1990s (similar to groundwater analysis?).*
  - *Corrective Action and groundwater remediation costs (CERCLIS)*
    - *Estimate avoided sites;*
    - *Rely on previous CCR analysis to estimate groundwater cleanup costs;*
    - *Rely on RTI data to estimate amounts of water protected from leaking UST sites; and*
    - *Potentially conduct a case study.*

3. Development of Outline and Recommendations for the preparation of an Annual Report on the “Benefits of the RCRA Program”

- Such a report would outline the reach of the program in terms of the amount of waste generated and related population demographics, as well as what we are

doing in terms of projects and spending to address the issues, and what the benefits we are gleaning from our program efforts.

- The desire would be to establish and codify an understanding of the available data, methods, and relative reasonableness of characterizing the impacts and estimating the benefits according to the various components that make up the program.
- We would also seek to consider including a set of “challenge questions” that we believe to be routinely requested by Congress, the Media, and our own upper management, so that such a report would help to make such information and estimates more readily available.

### **Deliverables for Task 3:**

There shall be 2 deliverables for each distinct component of analyses conducted under Task 3 including both a draft and final summary report of the analyses conducted. All such final documentation of analyses performed shall also be incorporated into any broader project documents associated with this Work Assignment and the overall project. [Note: See also the Schedule for Deliverables under Section 6 below.]

### **Task 4: Additional Potential Analyses As Needed**

Much of the prior early work conducted to date under this WA, have included more basic analyses that could be conducted based on readily available data, under short turnaround, and with limited available funding. Further analyses were then requested based on management feedback and interest in obtaining additional findings for the project. The intention is to continue conducting ongoing analyses to characterize the Benefits of the RCRA Program in this fashion, as funding becomes available. Task 4 now outlines further analyses of interest which may not be possible based on available funding at this time. Longer term and/or lower priority research shall be conducted and approved by the Project COR/WAM depending upon their projected feasibility, timing, and costs, and the availability of commensurate funding. The contractor is requested to submit a proposed budget for any and all of the following analyses, as feasible under the LOE limits of this Work Assignment Request.

#### **MORE IMMEDIATE FOLLOW-ON ANALYSES & QA FIXES**

1. Consider collecting new additional data for further improvement of key waste generation estimates in our current WasteWheel documentation.
  - a. Work closely with ORCR Municipal and Industrial Waste programs to improve food production, and industrial use estimates, at the specific request of RCSD.

2. Verify, update, and reconcile preliminary values (not yet QA'd) in existing deliverables and briefing:

- Recycling and LCA data: update and verify values from EPA internal presentation; update commodity prices; review, refine, and reconcile WARM results; examine whether attribution progress occurred;
  - C&D estimate needs to be updated.
  - P. 11: Cheryl will get us data on food recovery. Also, get information from the Methane Reduction Initiative.
  - Check \$700 million in annual impacts/benefits of fly ash and FGD gypsum reuse (p.12). Barnes said we used an estimate of over \$1 billion in a briefing for the Administrator.
  - Reference the precious metals benefits?
  - Caveat or note for the Beneficial Use section (BU) section on CCRs: we are promoting the safe reuse of CCRs.
  - P. 14 Benefits of programs including F019 Deregulation – Can we do this for zinc fertilizer, scrap metal, circuit boards, and chat materials?
- Update and improve upon the 2005 Financial Assurance results;
  - In the Financial Assurance section (p. 9), be specific about the kinds of facilities that require financial assurance – such as MSW facilities. (Are there other types of facilities as well?) Also, hone message in last bullet on p.9—“Financial Assurance is Working”...
- Reconcile CESQG numbers using the latest internal ORCR resolution;
- More closely examine/determine Foundry Sands benefits

ANALYSES INTENDED TO STRENGTHEN AND EXTEND BEYOND CURRENT FINDINGS

1. New Ideas for Analyses and Metrics that could be Highlighted

- *Try to find information that would enable us to compare the benefits of our programs against other programs. (Energy Star is one example program)*
- *Estimate the reduction in virgin materials use due to recycling. (e.g. “trees saved”, barrels of oil equivalents... ?)*

LOWER PRIORITY & LONGER TERM ANALYSES

1. *Flesh out the sections on RCRA Emerging Issues:*

- *Subcategories to capture special wastes vs. other types of regulatory improvements (new and novel RCRA guidance and regulations)*
- *Examples of deregulatory work based on new science and technology*
  - i. *Potentially examine changes in industry structure: utilize the Biennial Report data to evaluate changes in waste management by waste code to investigate whether a relative increase in safety has occurred in the last 20-30 years;*
- *Process improvement: further quantification of benefits (if available) and examples;*

#### **Deliverables for Task 4:**

There shall be 2 deliverables for each distinct component of analyses conducted under Task 4 including both a draft and final summary report of the analyses conducted. All such final documentation of analyses performed shall also be incorporated into any broader project documents associated with this Work Assignment and the overall project. [Note: See also the Schedule for Deliverables under Section 6 below.]

### **6: Overall Schedule for Deliverables**

<b>Task and Deliverable</b>	<b>Estimated Delivery</b>
<b>Task 1: Workplan and Budget Management</b> Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
<b>Task 2: Scoping and Documentation of Management Direction</b> Deliverable 2A: Notes from Management Meetings with ORCR OD Deliverable 2B: Update of Project Scoping/Outline Document	1 week after subject meeting 2 weeks after subject meeting
<b>Task 3: Specific Areas of Analyses and Next Steps of Highest Priority</b> Deliverable 3A: Individual Draft Reports on the Results of Additional Analyses Deliverable 3B: Final Reports for individual Task 3 Results and Incorporation of results into Overall Documentation for the Project	30 days after both the Work Assignment has been approved and the WAM has provided technical direction authorizing initiation of subject analyses. 2 weeks after WAM comments on Deliverable 3A

<p><b>Task 4: Additional Potential Analyses As Needed</b></p> <p>Deliverable 4A: Individual Draft Reports on the Results of those Additional Analyses for which there is sufficient funding per the approved Work Plan</p> <p>Deliverable 4B: Final Reports for individual Task 4 Results and Incorporation of results into Overall Documentation for the Project</p>	<p>30 days after both the Work Assignment has been approved and the WAM has provided technical direction authorizing initiation of subject analyses.</p> <p>2 weeks after WAM comments on Deliverable 3A</p>
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## 7.) **OTHER CONTRACTOR REQUIREMENTS**

The contractor shall comply with all applicable requirements of the contract, including compliance with quality-assurance requirements, providing monthly invoices detailing progress and notifying the WAM of the status of remaining funds, and other requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition to the contract requirements for QA, documents that can be of used in developing the appropriate QA/QC requirements are: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>.

All hard copy and electronic data collected for the purposes of analyses under WA # 2-15 and this subject Amendment (other than that data which is publically available) shall be shared with EPA. Similarly, any algorithms, electronic spreadsheets, and/or modeling tools generated by the contractor, for the purposes of analyses conducted to meet the SOW for WA # 2-15 and this subject Amendment, shall be shared with EPA.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-15	
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000004	
Contract Number EP-W-12-013		Contract Period   04/30/2012   To   04/29/2016		Title of Work Assignment/SF Site Name			
		Base                      Option Period Number      2		Highlighting RCRA Benefits			
Contractor INDUSTRIAL ECONOMICS, INCORPORATED				Specify Section and paragraph of Contract SOW			
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval				Period of Performance  From   04/30/2014   To   04/29/2015			
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 03/18/2015 with a LOE of 369 hours and \$36,897.66 (b)(4) cost (b)(4) fee). The total approved for this WA is now 997 LOE and \$94,360.71 (b)(4) cost (b)(4) fee). The Contractor is not authorized to go over the approve ceiling without the approval of the Contracting Officer.							
<input type="checkbox"/> Superfund				Accounting and Appropriations Data			
				<input checked="" type="checkbox"/> Non-Superfund			
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.							
SFO      22 (Max 2)							
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)      (Cents)      Site/Project (Max 8)      Cost Org/Code (Max 7)
1							
2							
3							
4							
5							
Authorized Work Assignment Ceiling							
Contract Period:		Cost/Fee:		LOE: 997			
04/30/2012   To   04/29/2016							
This Action:				0			
Total:				997			
Work Plan / Cost Estimate Approvals							
Contractor WP Dated:		Cost/Fee:		LOE:			
Cumulative Approved:		Cost/Fee:		LOE:			
Work Assignment Manager Name   Scott Palmer						Branch/Mail Code:	
_____ (Signature)                      (Date)						Phone Number   703-308-8621	
						FAX Number:	
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:	
_____ (Signature)                      (Date)						Phone Number: 703-605-0509	
						FAX Number: 703-308-7903	
Other Agency Official Name						Branch/Mail Code:	
_____ (Signature)                      (Date)						Phone Number:	
						FAX Number:	
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:	
_____ (Signature)                      (Date)						Phone Number: 202-564-8316	
						FAX Number:	



<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 2-16				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period   04/30/2012   To   04/29/2015			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number       2			Pohatcong Valley				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   04/30/2014   To   04/29/2015					
Comments: This action initiates Work Assignment, WA 2-16 entitled "Pohatcong Valley Groundwater Contamination Superfund site". Keith Moncino is appointed as the work assignment manager (WAM). The estimated LOE is 170 hours. The statement of work is attached. The contractor shall submit a workplan/cost estimate.										
<input checked="" type="checkbox"/> Superfund                      Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <span style="border: 1px solid black; padding: 2px;">22</span> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
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2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012   To   04/29/2015										
This Action:						170				
Total:						170				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name   Keith Moncino						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number   212-637-4353				
						FAX Number:				
Project Officer Name   Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:   703-605-0509				
						FAX Number:   703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name   Eulvid Rocque						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:   202-564-8316				
						FAX Number:				

## **Statement of Work**

**Contract: EP-W-12-013**

**Work Assignment: 2-16**

1. **Title: Pohatcong Valley Groundwater Contamination Site**
2. **Period of Performance:** Date of CO signature through 6/30/2014
3. **Work Assignment Manager: Keith Moncino**

Mailing Address:

US Environmental Protection Agency

18<sup>th</sup> Floor

290 Broadway

New York, NY 10007

Phone: 212-637-4353

E-mail: [moncino.keith@epa.gov](mailto:moncino.keith@epa.gov)

### **BACKGROUND**

EPA has been in litigation regarding the Site since 2009 to recover monies spent and that will be spent cleaning up the Pohatcong Valley Groundwater Contamination Superfund Site. In 2013, the United States/EPA amended its complaint to add additional parties to the litigation. The Site covers three operable units and involves ground water remediation, source of contamination remediation, and the installation of a water line to provide residents affected in numerous municipalities with potable water.

IEC provided extensive support in building the initial case and analyzing any information submitted by in discovery or pursuant to a FOIA request. IEC also provided extensive support in building the case against the additional parties. A large part of this support involves the compilation of a binder that includes numerous charts and summaries detailing all the corporate histories and connections between various related entities both for CERCLA liability purposes and financial viability that both EPA and

DOJ referred to in building its case. IEC had several conference calls with EPA and DOJ to review these charts and evaluate additional information as needed.

## **TASKS**

### **Task One: Task Management**

The Contractor shall prepare and submit a work plan. Work under this task shall include participating in a kick-off meeting with the WAM, preparing monthly progress reports, and other task management activities.

### **Task Two: Research and Information Gathering**

The contractor, Industrious Economics, Inc., (IEC) shall: 1) determine which Rio Tinto/Alcan entities have sufficient financial viability to be additional financial guarantors for a Consent Decree resolving cost recovery litigation; 2) evaluate the financial viability of several Rio Tinto entities that will be provided as options from the Settling Defendant to pose as an additional financial guarantor; and 3) evaluate the financial assurance mechanisms provided by the Settling Defendants to ensure that they meet EPA's requirements. IEC shall also help with ensuring that EPA is given all of the proper financial, corporate, and other information needed to evaluate the entities' capability to serve as a financial guarantor.

### **Task Three: Develop White Paper**

Contractor shall report the findings of task 2 in one final report documenting.

### **Task Four: Conference Calls and Face-to-Face Meetings**

Contractor shall take notes during any meetings/teleconferences with the EPA. For budgeting purposes, the contractor shall assume 5 teleconferences/meetings with the EPA.

## **DELIVERABLES AND SCHEDULE**

<b>Deliverable</b>	<b>Schedule</b>
Task Management	Work plan 2 weeks after receipt of work assignment
Research/Information Gathering	
Develop White Paper	No later than June 17, 2014
Conference Calls/Meetings Summaries	Summaries within 3 work days after each teleconference/meeting

## **ESTIMATE OF LABOR HOURS**

The estimated level of effort for this requirement is: 155 **hours**

## **PERIOD OF PERFORMANCE**

Date of Contracting Officer's signature through **06/30/14**.

The following terms and conditions are requirements of this task order:

## **TECHNICAL DIRECTION**

In accordance with EPAAR 1552.237-71–Technical Direction, the Task Order Contracting Officer's Representative (TOCOR) will provide Technical Direction during performance of this task order. Technical direction includes:

- (1) Instruction to the contractor that approves approaches, solutions, designs, or refinements; fills in details; completes the general description of work; shifts emphasis among work areas or tasks; and
- (2) Evaluation and acceptance of reports or other deliverables.

Technical Direction must be within the scope of the contract-level SOW. The TOCOR does not have the authority to issue Technical Direction which:

- (1) Requires additional work outside the scope of the contract or task order;
- (2) Constitutes a change as defined in the "Changes" clause;
- (3) Causes an increase or decrease in the estimated cost of the contract or task order;
- (4) Alters the period of performance of the contract or task order; or
- (5) Changes any of the other express terms or conditions of the contract or task order.

Technical Direction will be issued in writing by the TOCOR, or confirmed by the TOCOR in writing within five (5) calendar days after oral issuance.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number 2-16</p> <p><input type="checkbox"/> Other    <input checked="" type="checkbox"/> Amendment Number: 000001</p>																																																																		
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<p>Comments:</p> <p>The purpose of this amendment is to approve the contractor's work dated May 20th, 2014 with Level of Efforts, (LOE) at 170 and cost plus fee at \$17,898.02 <span style="border: 1px solid black; padding: 0 5px;">(b)(4)</span> cost <span style="border: 1px solid black; padding: 0 5px;">(b)(4)</span> fee). The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.</p>																																																																				
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